

SEQUENCE LISTING

SEQ ID	NMB	Sequence
1	0010	MAFLKLTEQNVQGKTVLIRADMNVPFKDGKISDDTRIRASLASIKYCVDNGASIVMTHLGRPTEGEFHPEDDVAP VA AHLGSLLGKDVKVLNDWRENKPALNAGDVMI.QNVRINKGEKKNDLELGKAYASLCDVFVNDAFGTAHRAQAST EAVAQAAPVACAGVLMAGELDALGKALKQPARPMVAIVAGSKVSTKLTIESTADKVDQLIVGGGIANTFLLAEGK AIGKSLAEHDLVEESKKIMAKMAAKGGSVPLPTDVVAKAFADAEEAVVKDIAADEAEAVVKDIADVADEMILDIG PKSAAALADLLKAAGTWWNGPVGVFEFDQFAGGTAKALEAIAQSKAFSIAGGDYLAAIAKFGVTEQIGYISTGG GAFLFLEGKELPAVAALEKRG
2	0018	MNTLQKGFTLIELMIVIAIVGILAVALPAYQDYTARAQVSEAILLAEGQKSATVTEYYLNHGEWPGNNTSAGVATS SEIKGKYVKSVEVKNGVVTQAMASSNNNEIKGKLSLWAKRONGSVKWFCGPVTRDKAKAANDDVTAAGANGK KIDTKHLPSTCRDASDAS
3	0030	MTRKILVTSALPYANGSIHLGHMVEHIQTDVWVRFQKLRGHACHYCCADDTHGTPVMLAAQKQGIAPEDMIAKVRE EHЛАДFTGFFIGYDNYYSTHSPENKQFSQDIYRALKANGKIESRVIEQLFDPEKQMFLPDRFVKGECPKCHAQDQY GDNCEVCGETTYSPTELINPSAVSGTKPELRESEHFFFKLGECAFDFLKAWTSGNNPHDGKPHLQAEALNMKWEWLGE GEESTTIISWDISRDAPYGFEPDAPGKYFYVWLDAPVGYMFKNLCDRIGVDFDEYFKADSQTEMYHFIGKDI LYFHALFWPAMLHFSGHRATCWTWNGELTVDGOKMSKSRGTFITAKSYLEQGLNPEWMRYYIAAKLNSKIEDIDL NLQDFISRVNSDLVGKYVNAARASGFIAKRFEGRKLKDVADESETAAGTQSEAIAEYCERREYAKALRDIMALAD IVNEYDANKPWELAKQEGQDERLHEVCSELINAFTMLTAYLAPVLPQTAANAAKFLNLEAITWANTKRDICKHAL NKYEHLMORVEQKVQDDLIEANKQSIAAAAAPAAEEGKYEKVAEQASFDDFMKIDMRVAKVLNCEAVEGSKTLKF DLDGFKEKRIIFSGIAASYPNPAELNGRMVIANFAPRKMAKFGVSEGMLSATADGKLKLLDVTGAQPGDKV G
4	0038	MPQNTLNIVLAAGKGTRMYSKMPKVLHRIGGKPMVGRVIDTAAALNPQNIVCUVIGHGKEQVLDTVKRDVVWVEQT EQLGTGHAVKTALPHLSAEGRTLVLGYDVLPIDEVETLETLEAAGNEVGLTDVPPNDPTGLGRIIRDNSGVTIAV EEKDADAVQKAVKEINTGILVLPNAKLENWLSSNNAAQGEYYLTDLIKAVALADGIVKHPVQVRASHLAAVGNNK LQLTELERI FOTEQAQELLKAGVTLRDPARFDLGRRLKHGQDVVIDVNCIFEGDIELGDNVEIGANCVINKAIGA NSKIAPFSHLESCEVGENNRIGPYARLRPOARLADDHVGNFVEIKNAAIGKTKANHTYIGDAEVGCKTNFGAG TIIANYDGVHKHKTIVGDEVRIGSNCLVAPVTGLNKVTTGAGSTITRNVEDNKLALARARQTVIEGWVRPEKDKQ
5	0045	MFSFFRRKKQETPALEEAQIQAETAAKAESELAQIVENIKEDAESLAESVKGQVESAVETVSGAVEQVKEVVAEML SEAEAAAEEKAEEQVEAAKEAVAETVGEAVGQVQEAVATTEEHKLGWAARLKQGLTKSRDKMAKSLAGVFGGGQIDE DLYEELETVLITS DMGMEATEYLMKDVRDRVSLKGLKDGNELRGALKEALYDLIKPLEKPLVLPETKEPFVIMLAG INGAGKTTSIGKLAKYFQAQGKSVLLAAGDTFRAAAREQLOQAWGERNNVTVISQTTGDSAAVCFDAVQAAKARGID IVLADTAGRLPTQLHLMEEIKVKVRLQKAMPDAPHEIIVVLDANIQONAVNQVKAFDDALGLTGLIVTLDGTAK GGILAALASDRPVVPVRYIGVGEIGIDDLRPFDARAFVDALL
6	0051	MNTDNLHDILDEMVPQVYSQKKQSRSETPAEIGAHFPLLDRLCETAEAQNASDILISKGPPLSLKINSALTPQPQK ALTGEETAAIAASTMNAEIQSEI FRRGEINYSVQSRSGTRYRANAYHSQGSAGLVLRRINHVI PQMQUELGLPEKLIK DLAVAPRGLLIIIVGPTGSGKSTTMATMLEHRNKTLPISHITIEDPIEFYKPRRCIFTQREIGVDTIWQTAQVNA MRQSPDVVCIGEVRSRESMEYAMQLAQTHGLCIFTLHANTAPQSLERILNFYPKEQHNOQILIDIALNLTGIIICQRL ALKQDKTGRTAVVVDLLINTPAIQDFILKGDLMNISKIMETAKTDGMQTMQDQNLFELYRHHGIIISYEALRQSVSANN LRLHIQLHKEGKTPELLYDRVNGLNLS
7	0052	MQITDLLAFGAKNKASDLHLSGGISPMLRVMRHMRRINLPEMSAEEVGNMVTSMNDHQRKIYQONLEVDFSFELP NVARFRVNAFNIGRGPAAVFRTIPSTVLSLEELKAPSIFQKIAESPGRMVLTGPTGSGKSTTLAAMINYINETQP AHILTIEDPIEFVHQSKKSLINQRELHQHTLSFANALRSALREDPDVILVGEMRDPETIGLALTAATGHLVFGTL HTTGAAKTVDRIVDVF PAGEKEMVRSMLESLSLTAVISQNLLKTHDGNGRVASHEILIANPAVRNLIRENKITQINS VLQTGQASGMQTMQSLQSLVRQGLIAPEVARRRAQNSMSF
8	0068	MQNNNEFKIGNRSVGVNHEPLIICEIGINHEGSLKTAFEMVDAAYNAGAEVVKHOTHIVEDEMSDEAKQVIPGNAD VSIYEIMERCALNEEDEIKLKEYVESKGMI FISTPFSRAAALRLQRMDI PAYKIGSGECNNYPLIKLVASFGKPII LSTGMNSIESIKSVEIIREAGVPYALLHCTNIYPTPYEDVRLGGMNDLSEAFPDAIIGLSDHTLDNYACLGAVAL GGSILERHFTDRMDRPGPDIVCSMPDTFKELQKGHALKLARGKKDTIAGEKPTKDFAFASVADKDIKKGEL LSGDNLWVKRPGNGDFSVNEYETLFGKVAACNIRKGQAQIKKTDIE
9	0089	MNQTSRDLTRISHNTKIVATLGPGSNNVLELDIMIRVGGLNVVRNFNSHGTPFHOENALIVREAAGRAGEIAII ADLQGPKIRVGKIAAGGIELNKGETLVIDAALEGEGETREAVGGLDYRDLPPDVAAGDVLWLDGLLTLTVESEGR IIITRVENSHVLSNKGINKRGCGLSAGALTEKDFRDLKTAIAICCDYLAISFVKAEDLHIAKVEEEMKGSTAV RPGLVSKIERVEAIENDEIILAGDGMVARGDLAVEVGHAAPVAPALQKRMIRRARELRRFSITATQMMESMITNPV PTRAEVSDVANAVLDGTDAMCSAETAVGAYPFETVSQMAII CAAAEKEQDSLNGVAEQVYPEAVSTNLAVAGGA VSVARAVHAKAIVALTESGSTAEISRHNTLPFALTPSVAQRRMAMYRGVRPLILATSTDHTALNEVETMLV EHNILHSGDQYIITSGSQMRQSGSTNTLEVLRVK
10	0109	MLKGTFITRHI PRGCRRFFQPNQARQTEIYQIRGTVMORRIITLLCAAGMAFSTOTLAANLEVRPNAPERYTVK

		QGDTLWGKSYLSPWQGRFLWDANRDQIHNPDLIYPDQVLVLRHVDGEPRLGLEQTDGIPVVKMSPDKEVSGYG IPAIDVNFYRIFMRHPQIVSRKETAAAPRLLSGPGRLLYTKGTRVYTKGLKEPGRYLTYRINKNITDPDTGKFLG QEVAFSGIVRSLDYTDSVLEQRSKQAGERPKDNEYHTRHPLITPLRTPSIQPLVVAETAISEIQQGDYLMKMPEDT DRFNMMMPHEPSRPVQAKIVSVFEGTRIAGQFOTITIDKGEADGLDKGTVLSSYKRKKTMQVLSNNFKSRDTVELI STPAEEVGlamVYRTSEHLSAILENISDISVGDAAAPGRDLNIPDQGRSRVKFGFNRE
11	0115	MRSSDILIVDDEIGIRDLLSEILQDEGYVALAENAEEARKLRRHOARPAMVLLDIWMPDCDGITLLKEWAKNGQLN MPVVMMSGHASIDTAVEATKIGAIDFLEKPISLQKLLSAVENALKYGAQETGPVFDKLGNNSAAIQEMNREVGA VKCASPVLILTGEAGSPFETVARYFHKGTPWSPARVEYLIDMPMELLQKAEGGVLYVGDIQYSRNIQAGIAFIV GKAEEHRRVRRVVASGSRAAGSDGIACEEKLAELLSSESVVRIPPLRMQHEDIPFLIQGIACNVAESQKIAPASFSEE LAALTRYDWPGNFDQLOQSVAATLLLEADGQEIGAGAVSSLLGQNVPAAEADMVGGNFNLPLRELREEVERRYFE YHIAQEGQNMSQVAQKVGLERTHLYRKLKQLGIGVSRAGEKTE
12	0124	MAKEKFERSKPHVNVTIGHVDHGTTLTAATTIILAKKFGGAACAYDQIDNAPEEKARGITINTSHVEYETETRH YAHVDCPGHADYVKNMITGAAQMDGAILVCSAADGPMPQTREHILLARQVGVPYIIVFMNKCDMVDDAELLELLEM EIRDLLSSDFPGDDCPIVQGSALKALEGDAAYEKKIFELAAALDSYIPTPERAVDKPFLLPIEDVFSISGRGTVV TGRVERGIIHVGEDEIEIVGLKETQKTTCTGVEMFRKLLDEGQAGDNVGVLRLGTREDVERGQVLAKPGTITPHTK FKAEVYVLSKEEGRHTPFFANYRPQFYFRRTDVTGAVTLEEGVEMVMPGENVTITVELIAPIAMEEGLRFAIREG GRTVGAGVVSIA
13	0126	MSKKWYVVQAYSGFEKNVQRILEERIAREEMGDYFGQILVPVEKVDIRNGRKTISERKSYPGYVLVEMEMTDDSW HLVKSTPRVSGFIGGRANRPTPISQREAEIILQQVQTGIEKPKPKVEFEVGQQVRVNEGPFADFNGVVEEVNYERN KLRVSVQIFGRETPVELEFSQVEKIN
14	0128	MAKVSKRLKALRSSVEANKLYAIDEATALVKAATAFKFEDSVDSFNLGVDPKSDQVIRGSVVLPKGTRVA VFTQGANAEAAKEAGADIVGFEDLAAEIKAGNLNFVVIASPDAMRIVGQLTILGPRGLMPNPKVGTVPNVAEA VKNAKAGQVQYRTDKAGIVHATIGRASFAEADLKENDALLDAIVKAKPAAKGQYLVKKAVSSTMGLGIRVDTSS VNN
15	0130	MSLNIEKKVAVEEISAAIANAQTLVVAEYRGISVSSMTELTRANARKEGVYLRVLKNTLARRAVQGTSFAELADQM VGPLVYAASEDAVAAAKVLHQFAKKDDKIVVKAGSYNGEVMNAAQVAELASIPSREELLSKLLFVMQAPVSGFARG LAALAEKKAGEEEAA
16	0131	MAITKEDILEAVGSLTVMEFLNDLVKAEEKFGVSAAA VAVAGPAGAGAADAEEKTEFDVVLASAGDQKVGVICKVR AITGLKEAKDIVDGAPKTIKEGVSKAEAEDIQKQLEEAGAKVEIK
17	0132	MCMNSFTEKKRIRSKAFKRENVLFPFLLATQIDSYAKFLQLENAFDKRTDDGLQAAFNSIFPIVSHNGYARLEF VHYTLGEPLEDIPECQLRGITYAAPLRARIRLVLILDKEASKPTKEVRENEVYMGIEIPLMTPSGSFVINGTERIVV SQLHRSPGVFFEHDKGKTHSSGKLLFSARIIPYRGSWLDFDPKDLLYFRIDRRRKMPVTILLKALGYNNEQILD IFYDKETFYLSNGVQTDLVADRLKGETAKVDILDKEGNVLVAKGKRITAKNIRDTNAGLTRLDVEPESLLGKAL AADLIDSETGEVLASANDEITEELLAKFADINGVKEITTLYINELDQGAYISNTLRTDETAGRQAARVAIYRMMRPG EPPTEEAVEQLFNRLLFSEDYSYDLSRVGRMKFNRTYEQKLSEAQQNSWYGRILLNETFAGAADKGGVVLVEDIVA SIATLVELRNHGGEVDDIDHLGNRRVRSVGETENQFRSLARVERAKERLNAESENLMPHDLINAKPVSAAIK EFFGSSQLSQFMDQTNPLSEVTHKRRVSALGPGLTRERAGFEVRDVHPTHYGRVCPIETPEGPNIGLINSLSVYA RTNDYGFLET PYRRVIDGKTEEIDYLSAIEEGRYVIAQANADLSDGNLIGLDTCREKGETIMATPDRVOYMDV ATGQVVSVAASLIPFLEHHDDANRALMGANMQRQAVPCLRPEKPMVGTGIERSVAVDSATAIVARRGGVVEYVDANR VVIRVHDEATAGEVGVDIYNLVKFTRSNQSTNINQRPAVKAGDVLQRGDLVADGASTDFGELALGQNMIAFMPW NGNYNEDSILISEKVAADDRTSIHIELNVVARDTKLGAEITRDIPNLSERMQNRLDES GIVYIGAEVEAGDVL VGKVTPKGETQLTPEEKLLRAIFGKASDVKDTSLRMPTGMSGTVIDQVFTREGIQRDKRAQSIIIDSELKRYRLD LNDQLRIFDNDAFDRIERMIVGQKANGPMLAKGSEITTEYLAGLPSRHDWFDIRLTDDELAKOLELIKVSLQQK REEADELEYIKKKLTQGDELQPGVQKMVKVFIAIKRLQAGDKMAGRHNKGVSRILPVEDMPYMA DGRPVDIV LNPLGVPSRMNIGQILEVHLGWAAGKIGERIDRMLKEQRKAGELREFLNRLYNGSGKKEDLDALTDEEIELASNL RKGASFASPVFDGAKESEIREMLNAYPSDDPEVEKLGFDNSKTQITLYDGRSGEAFDRKVTVGVMHYLKLHHLVD EKMHarSTGPYSLVTQQPLGGKAQFGGQRFGE MEVWALEAYGAAYTLOEMLTVKSDDVNGRTKMYENIVKGEHKID AGMPESFNVLVKEIRSLGLDIDLERY
18	0133	MNLLNLNFNPLQTAGMEEEFDAIKIGIASPETIRWSYGEVKKPETINYRTFKPERDGLFCAKIFGPVKDYECLCGK YKRLKFKGVTCEKCGVEVTLKSVRERMGHIELAAPVAHIWFLKSLPSRLGMVLDMLTRDIERVLYFEAFVVTDPG MTPLQRROLLTEDDYYNKLDEYGGDFDAKMGAEIRELLRTLNVAGEIEIILRQLEESTGSDTKIKKIAKRLKVLEA FHRSGMKLEWMIMDVLVLPVPLPDLRPLVPLDGGRFATSDLNDLRYRVINRNNRILKRLLELHAPDIIVRNEKRMQEA VDSL LDNGRRGKAMTGANKRPLKSLADMIKGKGGRFRQNLGGKRVVDYSGRSVITVGPYLRLHQCGLPKKMALELFK PFI FH KLEQGLASTVKA KKLVEQEVPEWDLLEEVIREHPIMLNRA PLHRLGIQAFEPILIEGKAIQLHPLVC AAFNADFDGDQMAHVPLSLEAQMEARTLMLASNNVLS PANGEPIIVPSQDIVLGLYYMTRDRINAKGEGLFADV KEVHRAYHTKQVELGTKITVRLREWV KNEAGEFEPVNRYETTVGRALLSEILPKGLPF EYVN KALKKEISKLIN ASFRLCGLRDTVIFADHLMYTGFGFAKGGISIAVDDMEIPKEKA ALLAEANA EAEVKEIEDOYRQGLVTNGERYNKV VDI WGRAGDKIAKAMMDNL SKQV IDRAGNEVDQESFNSIYMMADSGARGSAAQIKOLSGMRGLMAKPDGSI IETP ITSNFREGLTVLQYFIATHGARKGLADTALKTANSYLT RRLVDVTQDLVVVEEDDCGTSDFGVMKAVVQGGDVIEA

		LRDRILGRVTASDVDPSSGETLVEAGTLLTEKLVDMIDQSGVDEVKVRTPTCKTRHGLCAHCYGRDLARGKLVN AGEAVGVIAQSIGEPGTQLTMRTFHIGGAASRAAAASQVEAKSNGTARFSSQMRYVANNKGELVVIGRSCEVVIH DDIGRERERHKVPGAILLVQDGMAIKAGOTLATWDPTHTRPMIETEHAGMVKFENVEEGVTVAQQTDDVTGLSTLVV IDGKRRSSSASKLLRPTVKLLDENGVEICIPGTSPVSMAPVGAVITVREGQEIGKDVLAARIQPASSKTRDITG GLPRVAELFEARVPKDAGMLAEITGTWSFGKETKGKQRLIVTDVGDGVAYETLISKEKQILVHDGQVNRGETIVDG AVDPHDILRLQGEALARYIVQEVEQVYRLQGVKISDKHIEVIIHQMLRRVNIAADAGETCFITGEQVERGDVMAAN EKALEEGKEPARYENVLLGITKASLSTDTSFISAASFQETTRVLTEAAIMGKQDELRLKENVIVGRLIPAGTGLTY HRSRHQQWQEVEQETAETQVTDE
19	0137	MPPRRREVPKRVDLDPKFGSVELTKFMNVLMIDGKKSAERIVYGALEQIEKKTGKVAIEVFNEAIANAKPIVEVK SRRVGGANYQPVVEVRPSRRLALAMRWRDAARKRGEKSMDRLLAGELIDASEGRGGALKKREEVHRMAEANKAFS HFRF
20	0138	MARKTPISLYRNIGI SAHIDAGTTTERILFYTGTLTHKLGEVHDGAATTDMYEQEQRGITITSAAVTSYWSGMA KQFPEHRFNIIDTPGHVDFTEVERSMRVLGAVMVYCAVGGVQPOSETVWRQANKYQVPLAFVNKMDRQGANFF RVVEQMKTRL RANPVPIVIPVGAEDNFSGVVDLLKMKSIIWNEVDKGTTFTYGDIPAEVETAEWRQNMI EAAAEE ASEELMDKYLGGDELTEEEIVGALRQRTLAGEIQPMLCGSAFKNKVGQRM LDAVVELLPAFTDIPPVQGVNPNTEE ADSRQASDEEKFSALAFKMLNDKYVGQLTFIRVYSGVVKSGDTVLNSVKGTRERIGRLVQMTAADRTEIEVRA GD IAAAIGLKDVTTGETLCAESAPIILERMEFPEPVVIHIAVEPKTADQEKMGIA NLRAKEDPSFRVRTDEESQTI ISGMGELHLEIIVDRMKREFGVNEANICAPQVAYRETIRKAVKA EYKHAKQSGGKGQYGHVVIEMEPMEPGGEYEF IDEIKGGVI PREFIPSVDKGIRDTLPNGIVAGYPVVDVRIRLVEFGSYHDVDSQLAFELAASQAFKEGMRQASP AL LEPIMAVEVETPEEYMGDVMGDLNRRLRGVVLGMDDDGIGGKKVRAEVPLAEMFGYSTDLRSATQGRATYSMEFK KY SEAPAHIAAAVTEARKG
21	0140	MANQKIRIRLKAYDYALIDRSAQEIVETAKRTGAVVKGPIPLPTKIERFNILRSPHVNKSREQLEIRTHLRLMDI VDWTDKTTDALKLDLPAGVDVIEKVQ
22	0142	MTLGLVGRKVGMRVFDQGVSVPTVLDMSANRVTQVKS KDT DGYTAVQVTFQOKKANRVNKA EAGHFAGV EA GRGLIEFALTEEKLAELKAGDEITVSMFEGVQLDV TGTSGKGFGSTIKRHNF GAQRTSHGNRSRSHRVPGSIGMA QDPGRVFPGKRMAGQYGNKTATVQKLEVVRVDAERQLLLVKGAVPGAVNSD VVVRPSVKVG A
23	0143	MELKVIDAKGVSGSLSVSDALFAREYNEALVHQLVNAYLANARSGNRQKTRAEVKHSTKKPWQKGTRARSGM TSSPLWRKGGRAFPNKPDENFTQKVNRKMYRAGM ATILSQLTRDERLFAIEALTAETPKTKVFAEQVKNLGLEQVL FVTQQLDENVYLASRNLPNVL VLEAQVDPYSL RYKKVIITKDAVAQLEEQWV
24	0144	MNQQLTQVILA PIVSEKSNVLAQGQELDLEAAAAAADKE
25	0154	MARLREFYKETVVPPELVQKQFGYKSVMEVPRIEKITLNMGVGEAVADKKVMEHAVSDL EKIAQKPVVTVARKSIAG FKIRDNPVGCKVPLRRDQMFEFLDR LITIALPRVRDFRGVSGKSFDGRGNYNMGVREQII FPEIEYDKIDALRGL NITITTTAKTDEEAKALLSLFKPFPKG
26	0156	MSMHDPISDMLTRIRNAQRANKAAVAMPSSKLKCAIAKVLKEEGYIEDFAVSSDVKSILEIQLKYYAGR VIEQIK RVS RPLR IYKASSEI PSMVNL GJIAVSTS KGVM TDRKARS QVG GELL CIVA
27	0157	MSRVAKNPVTVPAGVEVKFGAEALVIKGKNGELSPLHSDVAIEFNDGKLT FVANNS SKQANAMSGTARALVSNMV KG VSEGFEKRLQ LIGVGYRAQAQGKIINL S LGF SHPIVYEMPEGVSVQTPS QT EIVLTGSDKQVVGQVAEIRAF R APEPYKGKGVRYVGEVVMMKEAKKK
28	0159	MAKHEIEERDG LIEK MVAVNRVTKVVKGRIMAFSALT VVGDGDGRIGMKGKGSKEV PVAVQKAMDQARRSMIKV PLKNGTIHHEVIGRHGATKVF M QPAKEGSGV KAGGP MRLVFDAMGIHNISAKVHG STNPY NIVRATLDGLSKLHTP ADIAAKRGLTVEDILGVNHG
29	0168	MQN STTEFLKPRQIDVNTFSATRAKVS M QP FERGF GHTLGNALR RILLSSMNGFAPTEVIA GVLHEY STVDG I Q E DV DILLNIKGIVFKLHGRSQVQLV LKSGSGV VSAGDI ELPHD VEILNPGH VICH LADNGQIEMEIKV EQGRGY Q SVSGRQVVRDENRQIGAIQLDASFSPISRVSF EVEPARVEQRT DLDKLVLDIETDGSIDP EAVRSAAR LI DQMS I FADLQGTPVEEVEEKAPPIDPVLLRPV DDL E LTVRSANCLKAEDI YYIGDLI QRTETEL KTPNLGRKSLNEIKE VЛАSKGLT LGSKLEAWPPVGLEKP
30	0171	MAKII VVTSGKGGVGKTTTSASIA TGLALRGYKTAVIDFDVGLRNLDLIMGCERRVYD LINV IQGEATLNQALIK DKNCENLFILPASQTRDKDAL TREGVEKVMQELSGKMGF EYIICD SPAGIEQGALM A LYFADEAIVTTNPEVSSV RDSDRILGILQSKSHKAEQGGSVKEHLLITRYS PERVAKGEMLSVQD ICDILHIPLLGVIPESQNVLQASNSGEPV IHQDSVAASEAYKDVIARLLGENREMRFLEAEKKSSFFKRLFGG
31	0173	MTLTELRYIVAVAQERHFGRAARRCFV SQPTLSIAIKKLEELA VSLFDRSSNDIITTEAGERIVA QARKVLE EAE LIRHLANEEQNELEGAFKLG LIFTVAPYLLPKLIVS L RRTAPKMLPLMEE NYTHTL TESLK RDV DAIIVAE PFQE PGIVTEPLYDEPFFVIVPKGHS FEELDAVSPRMLGEEQVLLTEGNCMRDQVLSSCSELAKQRIQGLTNTLQGSS INTIRHMVASGLAISVLPALTENDHMLFSIIPFEGTPPSRRV LAYRRN FVRPKALSAMKA AIMQSQLHGVFSI CD
32	0193	MTHMIYPKTYDVIVVGGHAGTEA ALAARMGAQTL LSHNIETLGQMSCNPSIGGIGKGHLVRELDALGGAMALA

		TDKSGIQFRRNLNASKGAAVRATRAQADRILYKAIAIREMLENQENLDLFOOAVEDVTLGERISGVITAMGVFKAP AVVLTAGTFLSGKIHIGLENYEGGRAGDPAAKSLGGLRELKLPQGRLKGTGPPRIDGRTIDFSQLTEQPGDTPV VMSVRGNADMHPRQVSCWITHNTQTHDIIRSGFDSPMFTGKIEGVGPRYCPSTEDKINRFADKDSHQIIFLEPEG LTTHEYYPNGISTSLPFDIQIALVRSMKLENAAHILRPGYAEYDYFDPRNLKASLETKTIAGLFFAGQINGTTGY EEAAAQGLLAGANAVQYVRGQDPLLRREQAYLGLVVDLITKGVNPEYRMTTSRAEYRLQLREDNADMRLTEDGY KIGLVSEAQWRMFNEKREAVEREIQLRKTWTYTPQKLAEGEQIRVFGQKLSREANLHDLLRPNLDYAAALMTLEG MPSENLSAEEVIEQVEIQVKYQGYIDRQNNEIDSRRDIETLKLPGIDYGVKGGLSAEVQQLNQHKPETVGQASRI SGVTPAAVALLMVHLKRGFKDAK
33	0196	MKRMLFNATQAEEELRVAIVDGQNLLDIDIETLGKEQRKGNIYKGIITRIEPSLEACFVYDGTDRHGFLPKEVSR YFQDYEGGRARIQDVLEKGMEVIVQVEKDERGNKGAAALTFISLAGRYLVLMPNNPRGGVSRRIEGEERQELKAA MAELDIPNGMSIIARTAGIERSAEELEWDLNLYLQWAQIEEAGKAHHDPYLLFMESSLLIRAIRDYFRPDIGEIL VDNQEVDQVAEFMSYVMPGNIGRLKLYEDHTPLFSRFQIEHQIESAFSRVSLSGGAIVIDHTEAWSIDVNSA RATRGADIEDTAKTNMEAEEVARQMRRLDLGGLVVIDFIDMENPKHQRDVENVRLDAKKDRARVQMGKLSRFG LLELSRQLKPALGESSHVACPRCAVTGVIESTALHVLIQOEAMKDNTGEVRAQPVVDATFLNEKRAEL FAMEERLDVNVLIPNIHENPHYEINRIRTDVEEDGEPSYKRVAEPEEDESAKPFGEKAKAARPEPAVKGVHR TSPAPTAPEKKTSWWDSSKAWLKRIFFGSETQAAPAAETSEKRSTANRSGSRANNRQRNPRRSKREGSKVREV AGKTAGQEARADKAETRNNGNRNRNERGDRAERANEAEIQSRSVQPAATTADAAPSETEVQTKRQRRNGRSERG QTAPETATVAETTVQTAENTPSEPTAEDKGSKPKSERNRERDSRDAKERRERNNQRDRQNGKKRNIPSAAKIE QYLNIDTADKVRSAAAHVFGETDANAPITVSIADPVAERDLPTASPASVNGDAPVYDAEKIRRATAAILPEGAT PKAEAQEMPSETATFTAEEQARETAQTRGLVLIETDPAALKAWAAQPEVQAGRGLRSEQPKPSEVATVPAEEMI QVETROG
34	0212	MTEQKHEEYGADSIQVLEGLEAVRKRPGMYIGDTQDGSGLHHMVFVLDNAIDEALAGHCDKITVTIADHSVSA DNGRGMPTGIHPKEGRSAAEVIMTVLHAGGFDDNSYKISGGLHGVGVSVNALSDWVTLTIYRDGKEHVFVFRV ETEEPLKIVGDSDKKGTVRFLASTETFGNVVEYSFDILAKRIELSFLNNGVDIETLDERDGKHESFALSGGVAGF VQYMNRKTKPLHEKIYAFGEKDGMSVECAMQWNSYQESVQCFNNIPQRDGHTLTLRQVMTRTINNYIEANE VAKKAKVETAGDMREGLTCVLSVLPDPKFSSQTKDKLVSCEIGPVVNEVISQALTDFFLEENPNEAKIITGKIVD AARAREARKAREITRKGVMGJLPGKLADCOEKDPALSELYLVEGDSAGGSAMQGRDRKFQAILPLKGKILNV EKARFEKMLASQEVATLITALGAGIGKEEFAEKLRYHRIIMTDADVDGAHIRTLLTFYRQMPPELVERGYIYI AQPPLYKAKYKGQERYLKDELEKDQWLIGLALEKAKIISDGRGTTIEGAELADTAQFLLAKTVIEQESRFVDELVLR AMLHASPIDLTSSENADKAVAELSGLLDEKEVALERIEGHEGHRFIKITRKLHNVMVSYIEPKFLNSKAYQTLQ TAAALKGMVGEAKLYKGENGYDADSFTALDILMSVAQGMNSIORYKGLGEMNPQLWETTMDPAVRRLLKVRIE DATAADEVFVTLMGDEVEPRRAFIENNALIAQNIDA
35	0219	MSQRVVITGLGQSPVGNTVAEAWDTLLTGSGIGAITRFDTSINSRVAGEVRGFDIGQYISAKEARRMDVFIHY GIAAAALQIAIDSGLDDVENLDKDRIGVNIGSGIGGLPGIEVTGKAVIEGGARKINPFFIPGSLINLISHVFTILK GYRGPSYGMVSACTGAHAIGDSLRLMIKYGDADIMVAGGAEGAISTLGVGGFAAMKALSTRNDPATARPWDKGR DGFBIGEGAGILVLEELAHAKKRGAKIYAEIVFGMSSDAYHITAPNEEGPALAVTRALKDAGINPEDVYVNAHG TSTPLGDADETALKKRAFGEHAYKTVSSTSMTGHLLGAAGGVEAVYSILAIHDGKIPPTINIFEQDVEAGCDDL YCANEARDAEIDVAISNSFGFGGTNGTLVFKRFKG
36	0246	MAIYQSGVIFDQVDTANPDCWTLDLEYVKRGGYTALRKILSENISQTDVIDEVKTSGLRGRGGAGFPTGLKWSFM SFPGEKYVVCNTDEGEPEGTFKDRDIIMFNPHALIEGMIIAGYAMGAKAGNYIHGEIIEGYQRFEAALEQARAAGF LGKNILGSDFEFELFAHHGYGAYICGETALLESLEGKKQPRFKPPFPASFGLYGKPTTINNTETFSSVPFIIRD GGQAFADKGIPNAGCTKLFCSIGHVERPGNYEVPLGTPFAEVLKMAGGMRGGKKLKVAPIPGGSSAPVLPADIMMQT NMDYDSISKAGSMILGSGAIIVMDEDVCMVKALERLSFYDESCGQCTPCREGTCGWLYRIVHRIVEKGKGMEDL LDSVGNQMAGRICALADAAVFPVRSFTKHFRDEFVHYIEHGGPMKEHKWWG
37	0286	MNFTRLLNQVLSTVQKKGNTFSDSPLNSFGGALVAGVASMLLNGKNRKTIKGSTAALGYLAYRGYOMWQONKG RATVTQSDFQPAGETEETYRSRTLRTMIAAAASDGMIDEAERRTIEQESGTDPETAAWLAAYRLPASIEDIAAAV GNDEALAAEAYLAARLVCADLSRKETVFLARLSQALKLDDNLVESLERQLG
38	0294	MKLKTLALTSLTLLALAAACSKQAETSPADSAQSSSSAPAAPAELENQVNTVLSTPIPOQQAGKIEVLEFFGYFC PHCAHLEPVLSHEIKTFKDDTYMREHVVWGDEMPLARLAAAVEMAGESDKANSIFDAMVNQKINLADDTDLKK WLSEQTAFDGKKVLAFAEAPESQARAQMEELTNKFQISGTPTVI VGGKYQVEFKDWQSGMTTIDQLVDVKREEQK KPQ
39	0329	MSVGLLRLILVQNOQVVTVEQAEHYYNESQAGKEVLPMLFSDGVISPKSLAALIARVFSYSILDRLHYPRHVRMLGV TEEQMVEFHCVPVFRRGDKVFFAVSDPTQMPQIQTVAASIEVELVIVEEDDQLAGLLDWVGRSTSILLQELGEGQ EEEESHTLYIDNEEAEDGPVPRFIHKTLSDALRGASDIHFIFYEHNARIRFRVDGQLREVVQPPILA VRGQLASRI KVMSSLRDLISEKRIQPDGRMQLTFQKGKPVDFRVLPTLFGEKVVMRILNSDAASLNI DQLGFEPFQOKLLLEAI HRPYGMVLVTGPGSGKTVSLYTCLNLTESVNIATAEDPAEINLPGINQVNNDQQLTFAAALKSFLRQDPDI IMVGEIRDLTETADIAIKAATQGHMVFSTLHTNNAPATLSRMLNMGVAPFNIASSVSLIMAQRLLRLCSSCKQEVE RPSASALKEVGFDEDLAKDWKLYRAVGCDCRCRGQGYKGRAGVYEVMPISSEEMQRVIMNGTEVDILDVAYKEGMV DLRRAGILKVMQGITSLEEVTANTND

40	0335	MSLQNIIEFENRADIPTTVTPEVKEAVLETIQLDSGKLRVAERLGVGEWKVNEWAKKAVLLSFRIQDNELVN DCVNKYFDKVPTKFADWSEDEFKNAGFRAVPGAVARRGSFVAKNNVLMPSYVNIGAYDEGAMVDTWATVGSCAQI GKNVHLSGGVGIGGVLEPLQAAPTIIEDNCFIGARSEIVEGVIVVEEGSVISMGVFIGQSTKIFDRTTGEIYQGRVP AGSVVSGSMSKDGSHSLYCAVIVKRVDAQTRAKTSVNELLRG
41	0336	MGFLQGKKILITGMISERSIAYGIKACREQAELAFTYVVDKLEERVRKMAEELDSELVFRCDVASDDEINQVFA DLGKHWDGLDGLVHSIGFAPKEALSGDFLDSISREAFNTAHEIISAYSIPALAKAARPMMRNSAIVALSYLGAVR AIPNYNVGMGAKASLEAGIRFTAACLGKEGIRCNGISAGPIKTLAASGIADFGKLLGHVAAHNPLRRNVTIEEVGN TAAFLSDLSSGITGEITYVDGGYSINALSTEG
42	0337	MSRPVPAVFGSVFHQSMPVLAYREGKWPTEQSSQDLSLAPGAHALHYGSECFEGLKAFAQDGFKIVLFRPTANI ARMRQSAIDLHLPRPETEAYLDALIKLVKRAADEIDAPAALYLRTPLIGTDVIGKAGSPSETALLYILASPVG YFKVGPVKILVETEHIRCAPHMGRVKCGGNYASAMHWVLKAKAEYGANQVLCPCNGDVQETGASNFILEINGDEII TKPLTDEFLHGVTRDSDVLTAKDLYGTVSERNFTVDELKAENGAEAILTGTAAVISPVTSFVIGGKEIEVKSQE RGYAIRKAITTDIYQGLAEDKYGWLVEVC
43	0351	MTILSDVKALGQQIWLDNLRSRSLVQSGELAQMLKQGVCGVTSNPQFQKAFAGDALYADEIAALKQQNLSPKQRYE TMAVADVRAACDVCLAEHESTGGKTGFSLEVSPESLKDAQGTVEEARRLYAAIGCKNAMIKVPATDAGIDAETL VSDGISVNLTLLFSRAQTILKAYAAYARGIAKRLAAGOSVAHIQVVASFFISRVGALDTLDPDKLGKTAIALAKA AYQDWAQYFGSPEFAALETKGANRVQLWASTGVKNPAYPDTLYVDSLIGAHTVNTVPDATLKAFTDHGTAKATLT EGVEEAQAQLAETAALGIDVETLATRLOEDGLKQFEEAFKLAPLA
44	0359	MSIKNAVKLIEESEARFVDLRFDTKGKQHHFTVPARIVLEDPEEFENGQAFDGSSIGGWKGIQASDMQLRPDAS TAFVDPFYDDATVLTCDVIDPADGQGYDRDPRSIIARRAEAYLKSSSIGETAYFGPEPEFFFVFDGIEFETDMHKTR YEITSSEGAWASGLHMHDGQNTGHRPTVKGGYAPVAPIDCGQDLRSAMVNILEELGIEVEVHSEVGTGSQMEIGTR FATLVKRADQTOQDMKYVIQNVAHNFKTATFMPKPIMGDNGSGMHVHQSIWKGQNLFAGDGYAGLSDTALYYIGG IIKHAKALNAITNPSTNSYKRLVPHFEAPTKLAYSAKNRSASIRIPSVDNSSLKARRIEARFPDPTANPYLAFALLM AGLDGICQNKIHPGDPADKMLYDLPPEEDALVPTVCASLEEALAALKADHEFLRGVFSKDWDISYIAFKEEDVRR IRMAPHPLEFEMYSL
45	0382	MTKQLSALFVALLASGTAVAGEASVQGYTVSGQSNIEVRNNYGECKNAYFDKASQGRVECGDAVAAPEPEPEP EPAPAPVVVVEQAPQYVDETISLSAKTLFGFDKDSLRAEAQDNLKVLQRLSRNTVQSVRVEGHTDFMGSDKYNQA LSERRAYVANNLVNSGVPVSRISAVGLGESQAQMVTQCEAEVALGAKVSKAKKREALIACIEPDRRVDVKIRSI VTRQVVPahnHHQH
46	0390	MYTRIMEISPWTLSRAKLEKEHKRLQESLTSLGNGYMGMRGSFEETYSADSHLGYIAGVWFPDKTRGVWWKNGYP KYFGKAINAFNSKVKIIVDQEVDLAKNDVAGFSVELDMQHGVLLRSFTVFGVRENCKFLSVAQKELAVIRWEA VSVDGKTHQVRIDSIIADAVKNEDSNYEKFWQVLDKGVSDSLSYIAAQTVANPFGVEQFIVNAEQTFAGSFKALG GSQTDWQVSNSFSEVGSTPETFEKRVIVTTSRDYQSLAEVKAAGRALSEKIAVGAFETLLDAHKAGWLHWRWEIAD VVIEGSDEAQQGIRFNLFQLFSTYYGEDARLNIGPKGFTGEKYGGATYWDTEAYAVPLYLALAEPETVRNLLQYRR NQLPQAQHNAREQGLAGALYPMVFTGIECHNEWETFEIIRNGAIPIYAIYNTNTGDEGYLAKEGLEVLVEVS RFWADRVRHFSSKRNGKYMIGHVTGPNEYENNINNNWYTNTLAAWVLDYTREALAKYPRPDLNVRADELEKWARDISAN MYRPHDEELGVFVQHDGFLDKDIRPVSALSPDDLPLNQKWSWDKILRSPFIQADVLQGIYFFSDRFNIDEKRRNF DFYEPMTVHESLSPCIHSILAAELGEEKAVEEMYQRTARLDDNLYNNDTEDGLHITSMTGSWLAIVQGFAQMKTW GGKLSFAPFLPSAWTGYAFHINYRGRLIKVAVGKENVVFULLKGESLDLQVYQKDITLDGSHTVALEK
47	0391	MTFTAVLFLDGVITDTAEHYRAWKLAELGISIDRKFNEQLKGVSRRDSILKRLAHGGKTVSEAFAELTRRK NDNYVEMIQAQVPEDVYVPGILPLLEALRANGKKIALASASKNGPFLERMGMLTHFFDAIADPAAVAHSKAPDIFL AAAEGVDADIQCIGIEDAAQVAAIAKAGALPIVGKAEDLGSIALVSGTAELTYAYLQSVWEQSGR
48	0426	MEQQQRYISVLDIGTSKVLALIGEVQDDDKINIVGLGQAPSRLRAGMVTNDATVQAIROAVNDAELMADTKITH VTTGIAGNHIRSLNSQGVVKIKDGEVTQADIDRAIETAKAINIIPDQKILDAAVQDYYIDTQLGVREPMSGVRL DTRVHITCASTAVQNVQKCIERCGLKSQDQIMLQPLASQAVLTDEKDLGVCVIDIGGGTTDIAVYMNGAIRHTS VIPAGGNLITKDLSSLRTPLDAAEYIKIHYGVASCDEGLGEMIEVPGVGDRTSRQVSSKVLAAIISARIQEIFG VVLGELQKSGFPKEVNLAGIVLTGGVSMMTGIVEFAEKIFDLPVRTGAPQEMGGLSDRVRTPRFSTAIGLLHAACK LEGNLPQPGENGAVQEREQGGGLLARLKRWIENSF
49	0427	MEFVYDVAESAVSPAVIKVIGLGGGCNAINNMVANNVRGVEFISANTDAQSLAKNHAAKRIQLGTLRGLGAGA NPDIGRAAAQEDREAAIEAIRGANMLFITTGMGGGTGTSAPVVAEIAKSLGILTVAVVTRPFAYEGKRVHVAQAG LEQLKEHVDSLIIIPNDKLMALGEDVTMREAFAADVNLRAVAGISEVVTCPSEIINLDFAVDKTVMSNRGIAM MGSGYAQGIDRARMATDQAISPLLDDVTLGARGVLVNITTAAPGCLKMSELSEVMKIVNQSAHPDLECKFGAAED ETMSEDAIRITIIATGLKEKGAVDFVPARSEVAPSKQEWSHNEGMIRTNRGIRTMLTAADFNDNQSVLDDFEI PAILRRQHNSDK
50	0446	MSQTIDELLLPHRNAIDTIDAELRLLNERAQHAAHAGELKGTGAVYRPEREVAVLRRQDNLKGPLPDESVARLF REVMSECLAVERPLTIAYLGPQGTFTQQAIAKHFQHAAHTMACPTIDDCFQVETRQADYLVAPVENSTEGSGVRT LDLIALVTLQACGEIVLRIHHNLLRKNGSTEGIAKVFSHAQALACQNDWLGRHLPNAERIAVSSNAEARLVAES DDGTVAAIAGRRAAEIYGLDMVAECIEDEPNNTTRFLVMGHETGASGSDKTSLAVSAPNAGAVASLLQPLTESG

		ISMTKFESRPSKSVLWEYLFFIDIEGHRRDAQIQTALERLGERASFVKVIGSYPTAVL
51	0462	MQAFSLYPPVGHPDSAKKRQNRADVFLPFWKQDNFLGKSVQYRFEEAQIYFTMPKPCAGVTMGRGDFFSNLFHQE SARMKKSVLAVLAALSLAACGGSEKNAVQPOADAASAANAEAAATDTLNINWSNYVDESTVEDFKKANNLKLYD LYENNETLEAKMLTGKSGYDLVPGIAFLPRQIEAGAYQVNKDLPNPKNIDPELLKMLETADPGNQYAVPYFSG VNTIAITAKGKELLGGKLPEGWDLFKPEYTHKLKSCGIALWDTPSEMFPILLNLYLGDPKGNSPEDLKAEEVL KSIRPDVKRFSPSIIDELARGDICLAAANGGDLNLAKARSEEVKNNGVIEVLTPKGFMGFIESWLIPADAKNVANA HKYINYTLDPEIAAKNGIAVTFAPASKPAREKMPAELVNTRSIFPNEQDMKDGFBMPQMSTDACKLSVSLWQKIKV GTN
52	0466	MRTNYCGLISEQYLDQTVTKGWHRRDHGGVIFIDLRDREGIVQVVIDPDTPEAFAAADSSRNEYVLSITGRVR NRPEGTTNDKMISGKIEILAKEIEVLNAATPPFQIDDENISEVNRLTNRVIDLRRPVMQRNRLRKYQAMGVRRY LDAQGFIDIEPTMLTRSTPEGARDLVPSRVHPGEFFALPOSQPLFKQLLMVAQFDRYYQITKCFRDEIDLADRQP EFTQIDLETSFLNEDEIMDITEGMAKQVFKDALNVLGDFPRMPYSEAMFYGSQDKPMRINLKFTELTDLMKTEE FKVFRGAADMKGGRVVALRPNGAEFSRKEIDEYTKFGYIYGAKGLAYIKVNDVSNSNGEDSGLQSPIVKYLSEN ALKEIARTGAQNGDIIFFGADAKVVNEAGALRIKVGLEHKGKDNGYFTDEWKPLWWDFPMFEYDEEADRYVAV HHPFATPKEGHEDLMVSDPANCLARAYDMVLNGWEIGGGSIRIHRADVQEKFVAALKISPEEQQEKGFIIDNLKF GAPPHGLAFLDRLVTLMTGAESIRDIAFPKTORAQCLTNAPNSVDDKQLRELSLRLRQKATEKEV
53	0477	MRENKIIFTGPVGVGKTTAAIASDEALVQTDASASDMTLDRKRNTTVAMDYGAISLDEDTKVHLYGTPGQERFNF MWEILSQGSMGLVLLDNARTNPKDLEFFLHSFRGLLEKAPVVVGITKMDIRSOPGIDVYHKYLAKHNLNVPVFE IDARKEDDVQQLVSAMLFSIDPGLEV
54	0530	MTVPHIPRGPVMDIAAFRITEEEKQRLLPAVGGIILFRRNFONIEQLKLTAEIKALRTPELIIAVDHEGGRVQ RFIEGFTRLPAMSTLGEIWDKDAGASAETAAGQVGRVLATELSACGIDLSFTPVLDDLGNCVIGNRSFHRNPEA VARLALALQKGLTKGGMKSCGKHFPGHGFWEGDSHLVLPEDWRSLSELETADILAPFRIMSREGMAAVMPAHVVYPQ VDTPKAGFSEIWLQIILRDRIGFKGVIFSDDLTMEGACGAGGIKERARISFEAGCDIVLCNRPDLDLREDFRI PDNPTLAQRWQYMANTLGSAAAQAVMQTADFQAAQAFVAGLASPQDTAGGVVKGEAF
55	0540	MFFKHIEAAPADPILGLGEAFKAETRPEKVNGLGIVYKDASGATPLVKAVKEAKRLLSETTKNYLTIDGVADYN AQTCIILFGKDHEIIASRAKTAQSLGGT GALRIAEEFAKRLNAQTIWISNPWPNHNAIAKAVGIQDKPYRYD AAKHGLWDGMIEDLSQAQKGDIVLLHGCHNPTGIDPTEQWETLAKLSAEKGWLPLFDFAQGFGNGLEEDAYG LRVFLKHNTTELIASSYSKNGMYNERVGAFTLVAEDEETAARAHQSQVKTIIRTLYSNPASHGANTIALVLKNDDL KAQWIAELDEMGRRIKAMRQKFVGLLAKAGASQNFDFIIKQNGMFSFSGLTPEQVDRLKNEFAIYAVRSGRINVAG ITDNNIDYLCE SIVKVL
56	0546	MKMQAVVVNVNVNAGDVEIREEVRPLEGYEALVEVEYCGVCHDLHVAAGDYGEKPGRVLGHEGIGLKVADGVK NLKVGDRVSIAWLFQSCGSCEYCNTRGTLCRSVLNAGYTADGMATHCIVSADYAVKVPGLDPAQASSITCAGV TTYKAIVSGVRPGQWIAIYGAGGLGNLGQYAKKVFQAHVVAIDINDDKLAFAKETGADLVVNAAKEDAAKVIQE KTGGAAHAVVTAVASAAFN SAVNCVRA GRVVAIGLPPESMDLSIPRLVLDGIEVVGSLVGRKDLEEAFQFGAEG L VVPKVQLRALDEAPAIFQEMREGKITGRMVIDMKKECCGGHH
57	0564	MEIIILGIVMFIVLVLALMILFAKSKLVSEGEDITIKVNGEKELTMPAGGKL LGALANE GIFIIPSACGGGSCGQC RRVVVKSGGGDILPTELSHISKREAREGRCR LSCQVNKTMDIEVPEEVFGVKKWECTVISNDNKATFIKELKLAIP EGEEVPFRAGGYIQIEAPPH T VAYKDFDIPKEYHEDWDKYNLWQYVSKDEPILRAYSMASYPEEKGIIMLNRIA TPPPRVPDAPPQMSYYIWSLKPQGDKVITSGPGEFFAKDTAEMVFIGGGAGMAPMRSHIFDQLKRLNSKRKITF WYGARS KREM FYVEDFDQ LAAEFPNFTWHVALSDPLPEDNW DGYTGFIHNVVYENHLKNHEAPEDCEFYMCGPPIM NQS VIKMLKDLGVEDENILLDDFGG
58	0589	MNLIQQLEQEEIARLNKEIPEFAPGDTVVSVRVVEGTRSRLQAYEGVVIARRNRGLNSNFIVRKISSGEGVERTF OLYSPTVEKIEVKKRGDVRRAKLYYLRLGTGKAARIKEKL PARKG
59	0595	MSRVLLVDDALLTELLTEYLSAEGLNRSPVDPGEAGVQEILSGQYDVVLDSSMMPKMNGLDVLKNVRARSTVPII MLTAKGDDIDRII GLEM GADDYVPKPCTPRELLARINAILRRAQHSQEQQNAPNSISVSDVLYPAK RQASVKDMP LELTSTEFNLEVLMRHAGQVSKETISVEALDRKLAKFDRS IDVHISIRHKLGDASLIQTVRGLGYLFVKN
60	0604	MKAARFYDKDIRIEDIPEPTVAPGTGINVAWCIGICGTDLHEFMEGPIFI PPGH PHPISGESAPVTMGE FSGV VYAVGEGVDDIKVGQHVVVEPYIIRDDVPTGEGSNSYHLSKDMNFIGLGGCGGGLSEKIAVKKRWVHPISDKIPLDQ AALIEPLSVGHAYVRSGAKEG DVALVGGAGPIGLLLA A VLKAKGKVIITELSKARKDKARESGVADYI LD PSEV DVVAEVKKLTNGEGVDVA FECTSVNKVLDLVEACKPAANLVI VSIWHPATINVHSVVMKELDVRGTIAYCNDHA ETIKLVEEGKINLEP FITQRIKDL DELVSKGFERLIHNNE SAVKII VSPNL
61	0610	MLPVRFTRVSDGIKRLTPASNQTAFYHPFENPFCRYSSFYWSIAIMTATTASSAKPYLKIQGLVKKFGDN YAVDNI DLDIYQHEI FALLGSSGSGKSTLLRMIAGMESPNQGKII LDGQDITKLAPYDRPINMMFQSYALFPHMTVEQNI AF GLKQDKMPKGEIAARVEEMLRVQMTKFAKRKPHQLSGGQQQRIALARSLAKRPKILLDEPLGALDKKL RQQTQL ELVNTLEQVGVTICMVTHDQEEAMTMATRIAIMS DQQLQVQGTPSDVYDYPNSRFTAEGI GETNIFDGVVIEDHAD YAVIECEGLENHVRIDHGLGGPSEQD I WSVIRPEDI DLYKEKPEYLG DYNWAKGTVKETAYLGSFAIYHIKLGNGR VVKSQVPAPWYVRNITPPTWDET VyI SWPENQPTPLFR

62	0617	MHVSELQTLHISKLLELAEEHGIEANRFRKQDLVFAIVRQMMKKGEGFTCSGTLEILPDGFGLRSADTSYLAGPDDIYVSPTQIRRFNLHTGDTIEGSVRVPKDNERYFALVRLDTINGDHPEVCRKILFENLTPLFPTEQQLKLERDLKSEENLTGRAIDLISPIKGQRLVAPPKGTVMLQNTIAHVTANYPEVELIVLLIDERPEEVTEMSRSVRGEVVSSTFDEPAQRHVQVAEMVLEAKRMVEHKDVVILLDSITRLARAYNTVPTSGKILTGGVDANALHRPKRFFGAARNVEEGSLLTIIATALVETGSRMDDVYEFEKGTGNMELHLDRRMAEKRFLFPAININKSGTRREELLVPNDQLQRMWLLRKFLHPMDEIEAAEFLIGKIKASKNNDDFFELMRKG
63	0618	MADNYVIWFENLRMTDVERVGGKNASILGEMISQLTEKGVRVPGGFATTAEAYRAFLAHNLSERISAALAKLDVEDVAELARVGKEIROWLDPFPEQLDAEIEAAWNKMDAGGADISAVVRSSATAEDLPDASFAGQQETFLNINGLDNVKEAMHHVFASLYNDRAISYRVHKGFEHDIVALSAVGQRMVRSDSGASGVMTLDDTESGYDQVVFTSSYGLGENVVQGAVNPDEFYVFKP TLKAGKPAILRKTMGSKHKMIFTDKAEAGKSVTNVDPEEDRNRF SITDEEITELAHYALTIEKHGRPM DIEWRGDGLDGKLYILOQARPETVKSQEEGNRNLRRFAINGDKTVLCGRAIGQKVQGKVRLIKDASEMDSVEAGDVLVTDMTDPEWPMK RASAIVTNRGGRTCHAIIARELGIPAVVGCNATELLKNGQEVTVSCAEGDTGFIYAGL LDVQITDVALDNMPKAPVKVMVN VGNPELAFSFA NL PSEGIGLARMEFIINRQIGIHPKALLEFDKQDDDELKAETTRRIAGYASPVDYV DKIAEGVATLAASVYPRKTIVRMSDFKSNEYANLVGGNVYEPHEENPMLGRGAARYVADNFKDCFALECKALKRVRDEMGLTNVEIMIPFVRTLGEAEAVVKALKENGLERGKNGLRLIMMCELPSNAV LAEOFQYFDGFSIGSNMTQLT LGLDRD SGLVSES FDERNPAVKVMLHIAISACRKQN KYVGICGQGP SDHDFAKWLV EGGIESVSLNPDTVIETWLYLANELNK
64	0623	MKKTLVAAA ILSLALTACGGGSDTAAQTPSAKPEAQSGKLNIYNWSDYVDPETVA AF EKETGIKTRSDYYDSNET LEAKVLTGKSGYDLTAPSIANVRQKIAGAYQKIDKAQIPHYGNIDKDLKMMEA VDPGNEYAVPYFWGINTLAIN TQQVKKALGTDKLPENEWDLVFKPEYTAKLKSCGISYFDSAIEQIPLALHYLGKD PSEN PEDIKAAVDMMKAVRG DVKRFRSSSGYI DDMAAGNLCAI GYGGDLNIAKTRAEEAANGVEIKVLT PKTGVGVWVDSFMI PRDAQN VANA HRY IDYTLRPEVAKNGSFVTYAPASR PAREL MDEK YTS DASI FP N KELMEKS FIVSPKSAESVKG VKLWQGLKAGK
65	0631	MAKV LIVPVSA GLDASAAA QAFAKALDAQI FQAV DATAETL LAQGKSDDWFDALV GKVA ALDA ANLVIE GIAP DAD KIYLAGKNV E L A L S L D A A A V F A V R S D N A D A D E L A N R V N L A K Q F F A A A P G V L E G F V V D G A A A S V A E A A A E K T G L T F F GSSDAL KDV S V L A G R E A K R L S P A Q F R Y N L I D F A R Q A D K R I V L P E G A E P R T V Q A A A I C H E K G I A R C V L L A K R E E V E A V A K E R G I S L P D S L E I I D P A S L V E Q Y V E P M C E L R K S K G L T P E D A R K Q L Q D T V V L G T M M M A Q N D V D G L V S G A V H T T A N T I R P A L Q L I K T A P G A S L V S V F F M L L P N Q V L V F G D C A V N P N P T A Q Q L A D I A I Q S A D S A K F G I D P K V A M I S Y S T V N S G S G P D V D T V I E A T K L A R E K R P D L A I D G P L Q Y D A A T V P G V G K S K A G P S P V A G Q A T V L V F P D L N T G N C T Y K A V Q R N A N V L S V G P L L Q G L R K P V N D L S R G A L V E D I V F T I A L T A V Q A K Q M E G
66	0634	MKTSIRYALLAA ALTAATPALADITVYNGQHKEAAQAVADA FTRATGIKV K L N S A K G D Q L A Q Q I K E E G S R S P A D V F YSEQI PALATL S A A N L L E P L P A S T I N E T R G K G V P V A A K K D W V A L S G R S R V V V Y D T R K L S E K D L E K S V L N Y A T P K W K N R I G Y A P T S G A F L E Q V V A I V K L K G E A A A L K W L K G L K E Y G K P Y A K N S V A L Q A V E N G E I D A A L I N N Y Y W H A F A R E K G V Q N V H T R L N F V R H R D P G A L V T Y S G A A V I K S S Q N K D E A K F V A F L A S K E G Q R A L T A V R A E Y P L N P H V V S T F N L E P I A K L E A P Q V S A T T V S E K E H A T R L L E Q A G M K
67	0637	MHDKTWSGRFNEPVSELVKQYTASIGFDRRLAEWDI QGSLAHAQMLKETGVLD EGD LADI RRGMAEILEEIRSGKIEWSSDLEDVHMNIERRLTDKIGDAGKRLHTGRSRNDQVATDIRLWLRDQITV1QSLIQSLQTA LLDLAEQNAETVMPGFTHLQVAQPVSF GH HMLAYV EMLGRDNERMADCRCRVNRMPLGAAALAGTTYP IQREITAELLGFEQICQNSLD AVSDR DFAIEFTA AASLVMVHLSRLSEELI LWMSPRFGFIDIADRFCTGSSIMPQKKNPDVPELVRGKSGRVIGHL TIGLITLMKSQLPLAYNKDNQEDKEPLFD TADTLIDT L R I Y A D M M R G V T V K P D N M R A A V M Q G F A T A T D L A D Y L V K G M PFRDAHEVVAQAVRHADQAGV DLS ELP LEV LQGFSDLIADDVYGVLTPEGSLNARNHLGGTAPEQVRFQV KR WREM LA
68	0641	MADFNQILTPGDV DGGIINV VNEI PAGSNHKIEWNRKLA AFOL DRV E PAI FAKPT NYG FIP QTL DEDG D E L D V L L V TEQPLATGVFLEARVIGVMKFVDDGEVDDKIVCVPADD RNNNGNAYKTLSDLPQQLIKQIEFHFNHYKDLKAGTTK VESWGDAEEAKKVIKESIERWNQ A
69	0663	MKKALATLIALALPAAA AEGASGFYVQADA A AHAKASSSLGSAKGS PRISAG YRINDLRF A DVYTRYK NYKAPST DF KLYSIGASAIYDFDTQSPV KPYL GARL S L N R A S V D L G G S D S F S Q T S I G L G V L T G V S Y A V T P N V D L D A G Y R Y N Y I GKVNTVKNVRSGELSAGVRVKF
70	0697	MKEHKARKRGQNFQDTRIISDIVNAVRPQADDV VIEIGPGLAAITEPLAKLKNRLH V V E I D R D I V C R I K T L P F A DKLVIHEGDVLQFDNGIAGKKKIVGNLPYNISTPLLFKLAEVADDV D VMHFM L QEV V ERMVAAPKSNDYGR LGV M L Q Y F F D M E M L I D V P P E S F D P A P K V D S A V V R M I P V K H R I G K A D D F E H F A K L V K L A F H Q R R K T I R N N L K E L A G D D D L Q A V G I N P Q D R A E H I A P E K Y V A L S N Y L A G K V V
71	0703	MKKILLTVSLGLALSACATQGTVDKDAQITQDWSVEKLYAEAQDELNSNSYTRAVKLYEILES RFP TS RHAQ QSQL DTAYA YYK D E K D K A L A A I D R F R R L H P Q H P N M D Y A L Y L R G L V L F N E D Q S F L N K L A S Q D W S D R D P K A N R E A Y Q A F E L V Q R F P N S K Y A A D A T A R M V K L V D A L G G N E M S V A R Y Y M K R G A Y I A A A N R A Q K I I G S Y Q N T R Y V E E S L A I L E L A Y K K L D K P R L A A D T R V L E T N F P K S P F L K Q P W R S D D M P W W R Y W H
72	0711	MSSGNIHIHSMTGFANAAAECGSKRINLDLRAVNHRFLDIQIRMPD D L R Y L E S G I R E K I S S H I A R G K V E C K I Q I Q D A E N G S Q S L E L N R D L V Q L A E I N K D L R K H D I A K L G V A D I L R F P G V L A S Q R E N T E L A K S I T E L K A L K D F T A A R K REGKKLGEHLQRL EAM E E I I D A L S E L F P T L L E T H K E K I R A R L V E A V G S I D N D R L Q Q E F A L F I Q K S D I D E E F S R L R

		THIAEVRRIVTEHKSSGKRLDFLMQELNREANTLGSKSIAAECTQASVELKVVLIEQMREQVNIE
73	0720	MNITLPDGSRQYESPVTAQIAASIGAGLAKATVAGRNGKLVDACDPIVEDSAVQIITPKDQEGLIEIRHSCAHLVGHAVKOLYPNAKMOVIGPVIEEGFYDIAEKPFPEVAAILEARMKELIAQDYDVVKIMTPRAEAIKIFQERGEYKLRLLIDMPPEVEAMGMYHHQEYVDMCRGPHVPNTFLKNFKLTLAGAYWRGDSNNEMLORIYGTAWATKDELKAYIQRIEEAEKRDRHRKLGKQLDLFHLQDEAPGMVFVWPKGWALWQVIEQHMRKELNAAGYKEVKTPOIMDKTFWEKSGHWDNYKDNMFTVSSEKREYAVKPMNCPGHVQIIFNNGLRSYRDLPMRLAEFGSCHRNEPSGALHGLMRVRGFQDDAHIFCTEDQIVSEARAFNELLIRIYKQFGFHDVSVLSLRPEKRGASDDVWDKAEQGLREALTACGVWEGELPEGAFYGPKIEYHVRDALGRSWQCGLQDFVLPERLNAEYVTENDRARPVMLHRAILGSLERFIGILIHAGSFPLWLAPVQLVIMNITEAQADYCREVAALKQAAGFRAELDLRNEKIGYKIRDNSQYRFPYQIVVGDKEKQENKVAVRKRAEDLGSLDDDFIAQLQQEITDALVNH
74	0724	MENVNRIVAEGIAAVEAAQDFNALEQIKARYLGKGETGLLTKLQMSPEERKTIGAHINECKNRFOTAFNAKREALNEVKLQARLAAEALDITLPGRAQEGGSLHPVTLTLQRVVELFHGMGFEADGPEIEDDFHNFOALNIPANHPARAMQDTFYVENGDVIRHTSPIQIRYMLDKKEPPIRIAPGRVYRVSDATHSPMFHQAEGLNVEEGVTFAIDLKAVFTDFIRFFFERDDLQVRFRPSFFFTEPSAEIDIMGENGWLEVGGCMVHPNVLKVNIDPEKYTGFAFGIGLDRFAMLRYNVNDLRLFFNDLNFNLKQFAK
75	0728	MQFSYSWLKTQADTELSSDKLEHLLMSGLEVEEAETAAPAFAGVIAEVKSVEKHPDADRINVRVDAGTGGLVQIVCGAPNVKAGIKVPCSLPGAVLPGNFKIKPTKMRGEVSDGMLCSTDDELGLPDGVNGLHILPEDAPVGTNIREYLDLDDTLFTLKIPNPRADCLSIKGIAREVSLTGCACRQPEIHTAPITGSRKQPQVINA PADCGRFISRVENVNARATT P DWM K Q R L E R S G I R S I A L V D I G N Y V M L E I G Q P M H V F D A D K L S G S L H I R R A R E G E T L C N E K T V S L S E N T L V V A D E K G V L S I A G L M G G A A S A V S D G T Q N I V L E A A W F A P E I I A G K S R Q Y G F G S D S F R F E R G V D Y R L Q A D A I E R A T E L V L Q I C G G A A G E M V E A Q G E L P E A K Q V G L R L D R L K T V L G V D I P A E Q V E T I L Q H L G L O P E K T A E G F R V T A P S F R F D I E I E A D L I E E I G R V Y G Y E N I P D D Y T S G R L K M L E L P E T R R P R F A V Y N E M A A R G Y R E V V S Y A F V D E Q W E Q D F A A N A D P I R I Q N P L A A Q Y A V M R S T L I G G L V E I L Q N N L N R K Q N R V C V F E I A R V F S K G S D G Q F V Q N E R I G G L W Y G A V M P E Q W G G K T R N A D F Y D I K A D V E N L L K N K A V E F V K T G H P A L H P G R A A N I V S D G K V I G F V G E L H P K W L Q K Y D L P Q A P L V F E I D M A A V L E C G K T R Y R V V S K F Q P V R R D L A F V M P E A M S H D D L L V L K G A A N K L V Q E I S V F D V Y R G T G L P E G M K S V A V K V I L Q D M E N T I T D E A V E P L I G K L I G A A T A A G A R L R S
76	0743	MGGQKTHFGFSTVNEDEKAGKVAEVHSVAKNYDIMNDVMSAGLHRVWKHFTINTAHLKKGDKVLDIAGGTGDSLRGWAKRVCGEVWLTDINSSMLTVGRDRLLNEGMLLPVSLADAELPFPDNYFNLVSVAFGLRNMTHKDAALKEMYRVLKPGGTLLVLEFSKIKYKPLEGAYDFYSFKLLPVMGRILIAKDAESYQYLAESIRMHDQETLKQMMLDAGFDSDVYHNMSSAGIVALHKGVKF
77	0757	MSEIGLVKIYFGKVRDLYEIDDKRMLMVASDRLSAFDVILDPIP SKGEILTQISNFWFKKLAHIMPNHTGOTVYDVLPENEAKALEKRAVVAKKLTPVKVEAVRGYLAGSGWKDYQKTSVCGIQLPEGMQEAQQLPEVIFTPSTKAAVGDHDENISFEECGRIIGKELAEEVRAKAVRLYTEAAEYAKSRGIICDTKFEGFLDENGTLLMDEVLPDSSRFWPADQYKVGTNPPSFDKQFVRDWLEQSGWNKKAPAKVPAVDIQKTVKEYREALTLLTQD
78	0758	MMFDKHVKTFQYGNQTLETGEIARQAAA AVKVSMDT VV L V A V T T N K E V K E G Q D F F P L T V D Y L E R T Y A A G K I P G GFFKREGKQSEKEILTSRLIDRPIRPLFPEGFYHDIQIVAMVSVDP E I D S I P A M L G A S A A L V L S G V P F A G P I G A ARVGYVNGVYVNLNPNTKAELAKSQLDVLVAGTSKAVLMESEAKI LPEDVMLGA V V Y G H D Q M Q V A I N A I N E F A D E V N P E L W D W K A P E T N E E L V A K V R G I A G E T I K E A F K I R Q K Q A R S A K L D E A W S A K E A L I T E E T D T I L A A N E I K G I F K H L E A DVRSQILDGQPRIDGRDRTVRPLNIQTSVLPRTHSALFTRGETQALAVATLGT S R D E Q I D A L S G E Y T D R F M L H Y N F P P Y S T G E V G R M G A P K R E I G H G R L A K R A L L A V L P K P E D F S Y T M R V V S E I T E N G S S S M A S V C G G C L S L L S A G VPLKAHVGIA M G L I L E G N K F A V L T D I L G D E D H L G D M D F K V A G T T E G V T A L Q M D I K I Q G I T K E I M Q I A L A Q A K E A R L H I L D Q M K A A V A G P Q E L S A H P R L F T M K I N Q D K I R E V I G K G G E T I R S I T A E T G T E I N I A E D G T I T I A A T T Q E A G D A A K K R I E Q I T A E V E V G K V Y E G T V V K I L D N N V G A I V S V M P G K D G L V H I S Q I A H E R V R N V G D Y L Q V G Q V V N V K A L E V D D R G R V R L S I K A L L D A P A R E E N A A E
79	0763	MKIANSITELIGNTPVVLNRLTEGLKAEVAVKLEFFNPGSSVKDRIA E A M I E G A E K A G K I N K N T V I V E A T S G N T G V G L A M V C A A R G Y K L A I T M P E S M S K E R K M L L R A F G A E L I L T P A A E G M A G A I A K A K S L V D A H P D T Y F M P R Q F D N E A N P E V H R K T T A E E I W R D T D G K D V F V A G V G T G G T I T G V G E V L K K Y K P E V K V V A V E P E A S P V L S G G E K G P H I Q G I G A G F I P T V L N T K I Y D S I T K V S N E A F T A R A I A E K E G I L V G I S S G A A V W S A L Q L A K Q P E N E G K L I V V L L P S Y G E R Y L S T P L F A D L A
80	0778	MPSETSSPRKENETEVHIPAAPFIVKQSGSNALAVCALVIAALGLGTSGFLFVQGQNVLKQELAFNQKIDKAALGESENAALLKDNLNRLQAAIQSELDRLDGNVKANGEQILEMQSYRELTKGRADWLDETETIILNLAQQQLVLTGNIQTAGVGULEHIDSRLSRFNQAEELPIKQAVSSDLAELKNRPYVDISGTALRDRLETAVGLPLM LDGVLKPGVQVKNEAASASWWQNVWEKSLGTLKGLVEIRRLENNDAMI SPEQAYFVRENRLRLLDARTALMQRNSEVYQGDLNNAEA AVRQYFDAKSPATQSWLKELAELKALDVRMTADDGLKNSLN A V R A Y R D G T R M T A A E N Q E A E Q A A S E P A N E K T A S E P AAASDVKTIEAPSLPSERKPEQPAKKQTVP EKAGRSPSAKGERA
81	0791	MIILHTNKGDIKIELDFDKAPVTAKNF EQYVKGDFYDGVI F H R V I K G F M I Q G G G M D E N M N E K E T R D P I Q N E A S N G L PNDKYTIA MARTSDPHSASAQFFINTADNAFLNFRSKELYGKTVQDWG YAVFGKVV DGF DVVDAIEGVSTKRHG Y HDDVPSEPVIKAEAV

82	0804	MTVLSKEQVLSAFKNRKSCRHYDAARKISAEDFQFILELGRSPSSVGSEPWQFIVVQNPEIROQAIKPFSWGMADA LDTASHLVVFIAKKNARSDSPFMLESLKRRGVTEDPAVAKSLARYQAFOADDIKILDDDSRALFDWCCRQTYIALAN MMTGAAMAGIDSCPVEGFNYAEMERILSGQFGLFDAAEWGVSAATFGYRVQEIAKARRPLEETVIWA
83	0814	MOTWQLPEHIAVDLPTNARQLESAREQLLALFRVHGYELVQPPMLEAHSLIHTIDAGLSLKTILVTDRLSGRQLG IRADITPOVARIDAHLLSANQGINRLCYAGPVLHAQPDGLLNMRPEPLQAGAEMYGFADIRGDIELIDLMLKSMKIA DMGKVLLSLGHIGIFRALSAAHLDAGQSATLLALMQDKDTGAVEAQVKAWKLDGMWAKAFSLLPRLYGGREVLSD ARGRLPDLSAVGGALGELQAVCDAPDCEIHDLSELRVVDNYHTGLLYAAYAADFHDAVARGGRYDGLGGYFGRAR PATGFSFDLRSFIGRLPAIERQPAVLVDAEAAHEAHEALREOQGCVVIDYIGHNVSEELAGRKKTDGVWQV VKR
84	0815	MAMAKNVVVIGAQWGDEKGKIVDWLAEEAGGVVRFQGHHNAHTLVVGGKKTILRLIPSGILHESLDFIGSGVV VSPEALLEGEDELNAAGVKNVEGRKLIAPTCPLILPYHALDQAREASRGKGKIGTTGRGIGPAYEDKVARRAIRA ADLLHPEKLRKLDLAVLAYYNVQLQHLHNAPVKADEVMAVIEKVAPRIAPMITDVSRLNEKNNGEKLFFEGAO GALLDIDYGTYPFTVTSNCAGAASAGAVGPQMLDYVLGIVKAYTRVGSGPFTELFDEVGVGLAERGHEFGSV TGRARRCGWFDDAALKRSITQINGISGMCITKLDVMGVETINICVGYELPDGKTDILPCGSDAVETCKPIYETMP GWRESTFGVKDYGALPENAKAYLKRIEVCAGAPVAIVSTGPDREETIVLHHPF
85	0828	MTIIVTGAAGFIGSNIVKALNQRGITDIVADNLSKGEKFKNLAECEIAHYLDKHEFIRQVREHILPYQNIIEAVFH QGACSDTMNHGDLYMMDDNNYQYTLDDLWQCDERIPFLYASSAAVYKGGEI FREERELEKPLNVYGYSKLFQDVL RRRMKEGLTAQVVGFRYFNVYQHGKGRMASVAFHHFHQYREHGVNLFGSNDGYGNGEQTRDFVSVEDVAKVN LYFFDHPLELSGIYNLGTGRSQQFNELAATVNACRAEGKPEMSLKEVELEEEIRYIPFPDALKGKYQSFQTQADIT KLREAGYKEEFFDVKSGVDRYVKWMLENLA
86	0854	MAQKIQSVKGMNDLLPVQKDFKLTAASFQAFEDTVGRWTRAYGYQQIRTPIVEQTGLFVRSI GEETDVGKEMYT FSDSNDSSLSLRPEGTASCLRAVVEHNLNNSPQKLWYMGPMFRERERPKGRYRQFHQVGEALGFEGPDIDAEI IAMSADLWEKLGIREYLTLIEINSLGNEERAHRAALVEYLTRYEDKLDDESKRLLKTNPLRVLDTKNPDLQEI AAPRLVDYLGEDSQNHYVRFKAMLDGLQYIENPRLVRLGDYYNQTVFEWTTDKLGAQATVCGGGRYDGGLIEELG GKPAPSIGFAMGIERLLLVEYGSLEVNAAPDVYAMHQEGADLQVMKYAQLRAQGFNMQHSGYQSLKAQMKK ADNSGARFALIVAQDELANGTVTLDKMDNGAHGQQTVAEADLTPTLQQWKNA
87	0875	MAAYDSLVMFTGNANPELAQRVVRHLDISLGNASVSKFSDGEAVEVELLENVRGRDFVILQPTCAPTNNDLMEILTM ADALKRASAGRITTAIPYFGYARQDRRPRSRVPISAKLVANMLSAGIDRVLTVLHADQIQGFFDIPVDNIYAT PILLNDIKQORIENLTVVSPIDGVVRAVAKSLNADLAIIDKRRPKANVAEVNNIIGDIQGRTCLIVDDMIDTA NTLCKAAVALKERAERVLAYASHAVFSEAVSRIASSEIDQVVVTDTIPLSEAACKNCDRIRQVTIAGLLAETVRR ISNEESVSYLFNEEVMTGSMLLP
88	0876	MTYEIQASVREAQGTGASRRLRREGQIPGILYEGOEPVIAVDHKTVFYALEKESFHTALIKLSLNGETKDVIVR DFQMHPFRREVQHIDFQAVKADQLVRIRVPLHIVNAENSQAVLQGGRVSLINTSVEVVALPANI VAGDILHLSDIKLPPEGVESVSLKRNNENLAVATVTGKR
89	0878	MNTPLPYSDYLIRILTASYDVAETPLEPARSLSVRLKNNILLKREDLQPVFSFKIRGAYNKMSKLPKDALACGV IAASAGNHAQGVALSAQRJLCRAVIMPPETTPKIVDAVKSHGGEVVLGVSYNDAYDAMELAKEGLTYIAPFD DPDVIAQGQTVGMEIVSQHPDPIRAVFVPIGGGLAAGVAIFIQVRPEIKVIGVQTNDCSCMKQSVEAGEIVHLK DVGLFSDGTAVKVVGNETFRICKELLDEIITVTDAVCGAVKDFDDTRSITEPAGALALAGLKAYIAREGAENQT LIAVTSGANMFHRLRHVSERSELGENEGIFAVTIPEERGSFLKFVNILGNRNITEFNYRYGDDEKAHI FVGLQAGPQDLAVIGSRLDEAGLPNVDLTNNEIAKIHRYMVGGRTDKVENERLVSFEPPERPGALARFLNMQGGWNITL FHYRNHGADYGRILVGIDVPPHDAAFDGFLESLGYSYHEETQNAAYKLFLA
90	0884	MEHKLPOLPYELDALSPLHSKETLEFHGKHQTYITNLNNQIKGTEFENLPLEEIVKKSSGGVFNNAAQWTWNHTF YWLGFTSKQGKPAGELAAAI DAKWGSFEKFQEAFCNACAAGTFGGSGAWLVKTPAGGLDLVSTSNAATPLTTENTP LLTCDVWEHAYIDYRNSRPNLYLKGFWEVNWDEVAKRFAALS
91	0885	MNDYAMPSEDREVGALSPPHSMEAQSVLGGLMLENPAWDRIADVSGEDEFYRHEHRLIFRSIAKLINESRPAD VITVQEDLQRNEELEAAGGFEYLITLQAQNTPSAANIRYAEIVRERSIMRQLAEVGTEIARSAYNPQGRDAGQQLD EAENKVFQIAESTAKSKQGFLEMPDILKEVVRQIDMLYSRDNPDEVGVPTGFIDLDKKTSGLQPGDILIIVAGRPS MGKTAFSINIAEHVAVEGRLPVAVFSEMEMGGAQLMVRMILGSVGRLDQSVLKTGRLEDEHWGRLNEAVVKLSDAPVY IDETPGLTAELRARARRIARQFNNKLGIVIDYLQLOMAGSGRSNRASELGEISRSLSKALAKELQVPIIQLSQLS RTVESRTDKRPMMSDLRESGAIEQDADLIMFMYRDEYYNQDSPMKGLAECIIGKHRNGPVGKIFLTWTGQFTKFDN AAYIPEEAKIED
92	0894	MNTLLNQLKPYFPARLREAMQGISAPEGLEAVPLHIGEPKHTPKVITDALTALEKYLPTAGLPELRQACAN WLKRRYDGLTVDADENLPVLSREALFSVQTVLNPVSDGIKPAIVSPNPFYQIYEGATLJGGGEIHFANCAPS FNPDWRSISEEVWKRTKLVFCSPNNPSGSVLDLGWKEVFDLQDKYGFIIASDECYSEIYFDGNKPLGCLQAAAQ LGRSRQKLLMFTSLSKRSNVPGLRSGFVAGDAELLKNFLLYRTYHGSAMSIPVQRASIAAWDDEQHVIDNRRMYQE KFERVPILOQVFDVLPDASFYIWLKVPGDDLALARNLWQKAQIQLPGRFLARDTEQGNPGEGYVRIALADV ATCVKAAETIVSLYR
93	0920	MTQKSTIVYTHTDEAPALATQSLLPIVQAFARHADIDVKTSDISLSGRILA AFPEYLTEAQRVPDALAELGELVKQ

		PDANVIKLPNISASVPQLTAAIKELQSKGFAVPDYPADPOTDEEKAVRERYDRIKGSAVNVLREGNSDRRAPKAV KNFAKKNPMSGAWTKDSKTHVATMOSGDFHNEQSIVPEATSIVFTDKQGNKKELREPVALKAGEIIIDATVM SKKALLAFLAEQVKDAKAKGVLFSLHMKATMMKVSDPIIFGHAVKVFAPVFEKFGDKLAAAGVNVNNGFGNLLAN LDKLDADTRTAVEAEIAAVYAAPDLAMVDSLSDKGITNLHVPSDIVDASMPAMIRNSGRMWDKNGKAQDTKAVIPD SSYAGVYQATIDFCREHGAFFPTTMGTVPNVGLMAQAAEYGSNKTFEIADGQVQVIDAAGKVLMQHDVEAGDI WRMCQTKDAFVKDWVQLAVNRARLSNTPAWFWDENRPHDKSLLAKVKAYLAELDTNGLDIRVLAPEEAQFKSLGR LKNGEDTISVTGNVLRDYLTDLFPILELGTSAKMSIVPLMNNGMFETGAGGSAPKHVOQQFLEENHLRWDSLGEF LALAVSFELAQLKTGNAKAQVLADTLDAATEKLLNDKSPKRKAGELDNRGSHFYLTLYWAQELAAQDKDAELKAA FTPLAAALTADAEEKIVAELSAVQGKAADIGGYAANPEAKAQMRPSVTFNQALNA
94	0944	MTTLHFSGFRVGAFRELKFAQEKEYWRKEISEQELLAVAKDLREKNWKHQVAANADFVAVGDFTFYDHILDLQVAT GAI PARFGFDQSOLNSLEQFFQLARGNKDQFAIEMTKWFDTNHYHLVPEFHADTEFKANAKHYVQQLQEAOQALGLKA KPTVVGPLTFLWGKEKGAVEFDRSLLPKLLPVYVEILTALVEAGAEWIQIDEPALAVDLPKEWVEAYKDVLATL SKVSAKILLSTYFGSVAEHAALLKALPVDGLHIDLVRAPCQLDAFADYDKVLASGVIAGRNIWRANLNKLETVEP LQAKLGDRLIWSSCSLLHTPFDSVEEKLANKPDLYSWLAFTLQKTQELRLVKAALNEGRDSVAEEELAASQAAA DSRANSSEIHRADVAKRLADL PANADQRKSPFADRIKAQQAWLNPLLPTTNIGSFQOTTEIRQARSFKKGELSA ADYEAAKKEIALVVEEQEKLDDLVLVHGEAERNDMVEYFGESELLSGFAFTQYGWVQSYGSRCVKPPIIFGDVSRP AMTVAWSTYAQSLSKRPKMGMLTPVTILQWSFVRNDIPRSTVCKQIALALNEDVLDIEKAGIKVIQIDEPAREG LPLKRADWDAYLNWAGESFRLSSAGCEDSTQIHTHMCYSEFNIDILPAIAAMDADVITIETSRSDMELLTAFGEFQY PNDIGPGVYDIHSRPRVPTAEVEHLLRAKIEVVPERLWVNPDCGLKTRGWKETLEQLQVMNNVTRKLRAELAK
95	0946	MALQDRTGQKVPSVVFRTRVGDWTKDVSDDLFKGKVVFSLPGAFTPTCSSLHPRYNELFGAFKENGVDAYC VSVNDTFVMNAWAAEESDNIMIPDGNGEFTEGMGMLVKGEDLGFGRKSWRYSMLVNDGVVEKMFIEPEEPGDPF KVS DADTMLQFVAPDWKAQESVAIFTKPGCQFCAKAKQALQDKGLSYEEIVLGKDATVTSVRAITGKMTAPQVFIG GKYIGGSEDELEYLAKN
96	0947	MKKIQADVVVIGGGTAGMAGFRNARLHSNDNVYLIENNFGTTCARVGCMPSKLLIAAAEARHHALHTDPFGVHLDK DSIVVNGEEVMQRVKSERDRFVGFWADVEEWPADKRMGSASFIDEHTVQIDEHTQITAKSFVIATGSRPVILPQ WQSLGNRLIINDDVFSWDTLPKRVAVFGPGVIGLELGQALHRLGVKVEIFGLGGIIGGIIDPVVSDEANAVFGEEL KLHLDaktevkladgnvevhweQDGEKGVFVAEYMLAAVGRPNVDNIGLENINIEKDARGVPVADPLMTQTSIP HIFIAGDASNQLPLLHEAADQKGIAQDAGNAGRPNIGGGLRRSTIGVVFTSPQIGFVGLKYAQAQYQADEFVIGE VSFKNQGRSRVMLVNKGMRLYAEKATGRFIGAEIVGPAAEHLAHLLAWAHQMKMTPQMLDMPFYHPVIEEGLRT ALRDADAKLA
97	0955	MMDEKLNFSYLFGSNAPYIEELYEAFILENPDAVDEWKQYFTDLSKQPGTVAVDVAHTPIRESFVTLAKKIASAV AGGADEAMLKKQVSVLRLISAYRIQVGAAQLDPLKRIPPRDIEALDPKFHGLSDADMALQFMGEGDFANRGKLP LSQIISNLKQTYCGHIALEYIYIPNTEERRWVRNYESVLSTPHYNADQKRRLKEMTAAETLERYLHTKVGQKR FGVEGESIAQLNYLIQNAGKDGVEEVIIGMAHGRGLNVLVNILGKKPGDLFAEFEGRAEIKLPSGDVKYHMGFS SDIATPHGPMHVSLAFNPNSHLEIVNPVVEGSARAKQKRLGENGRDKVLPVLIHGDSAFIGLGVNQATFNLSKTRGY TTGGTVHVINNQIGFTTSDIRDTRSTVHCTDIAMVSAPVIHNGDDPERVCFAIQAALDYRKFKHDKDIVDVVC YRKWGHNEGDDPTLTQPMYKKVSVQHPGARALYTEOLIAEGVVTQAEADGYIQAIRDALDKGEHVEQTTLNFQRT QIDWSKYQGKDWRHETGLPAADIERLTEKFTAVPEGFALHPTAKRVIYEARAKMASGKQAIIDWGMETLAYASLV TKGHGVRISEDGSRGTFSHRHAVLHDQKREKWDDGTIVPLRHMGEGMGEFLVIDSILNEEAVMAFEYGFACSA KLTIWEAQFGDFANGAQVTTIDQFLSSGETKWGRCLGTTILPHGYDQGQPEHSSERVERWLQLCSENNMQVIMPSE ASQMFHLLQRQVLGYSRKPLVIFMSKRLRFKGAMSPLENFTEGSTFRPVIGDTAERASNDSVKRVVLCAGQVYYD LEAGRAERKLEDDVAIVRVEQLYPPYDEVKAELAKYPNAKSVVVAQEEPKNQGAFYQIRHRIEDVISEEQKLSYA GRPSSASPAVGYSSKXIAQLKQLVEDALAL
98	0956	MIIDVKVPMILSESVSEGTLLEWKKGVEAVERDEILIDIETDKVLEVPSPQAGVLVEIVAQDGETVVADQVLARV DTAATAAAEAPAAPAEEAAPAAPAATQNNAAMPAAKLAAETGVDVNALQGSGRDGRVLKEDVQNAAKPAGAAA PAVALPAGARPEERVPMRSRLRARVAERLLASQQENAILTTFNEVNMKPIMDLRAKYKEKFEKEHGVKLGFMSSFK AAVAALKKPVNNAVDGKDIVHGYFDIGIAIGSPRGLVVPILRDADQMSIADIEQAIVDYAKKAQDGKIAIEDL TGGTFSITNGGTFGSMMSTPIINPPQSAILGMHATKERAVVENGQVVVRPMMLALSYDHRIIDGREAVLTLVAIK DALEDPARLLLDL
99	0959	MNLHEYQAKELLASYGLPVQGGILAHNGEEAAAAYDKLGGKFAVVKAQVHAGGRKAGGVKVVKSREEAKEVAESL IGTNLVTYQTDANGQPVNSVLVCEDMYPVQTELILGAVVDRSTRITFMASTECCVEIEKVAETPEKIFKVTVD LVGLQPCQAREVAFQLGLDKQINEFVKLMTGAYKAFVENDFALFEVNPLAVRENGALACVDGKIGIDSNALYRLP KIAELRDKSQENERELKASEFDLNYVALEGNIIGCMVNGAGLAMATMDIILKLGGQFANFLDVGGGATKDRVVEAFK LILEDKSVQGVLINIFGGIVRCDMIAEAIAVAVERINVNPVVVRLEGNNAEGLAKILNESGLKLTSA DGLNDAAEKIVAAVNA
100	0960	MSVLINKDTKVLVQGFTGKNGTFHSEQALAYGTVVGGTPGKGGQTHLNLPVNTMKEAVKETGADASVIYVPAP FVLDSIVEAVDGSVGVLVVVITEGVPTLDMLKAKRYLETNGNGTRLVGPNCGVITPGECKIGIMPGHIHPTGRIGI ISRSGLTLYEAVAQTTKLGQSTCIGIGGDPIPQGMNQIDALKLFQEDPDTDAIMIGEIGGTAEEAAYIQSNV SKPVVGYIAGVTAPKGKRMGHAGAIISGGKTAEEKFAFEKAGIAYTRSPAELGTTMLEVAKGLA

101	0983	MSSIKRALISLSDKTGAVEFAQTLHKLGVEILSTGGTAKLLADAGVPVIEWADYTGFPEMLDGRVKTLPKIHGGI LGRRDLDEHVAKMEEHGINIDLVCVNLYLFAATIAKPNTLEDAIENIDIGGPTMVRSAAKNWKHVAIVTDTADF PAIAAELEANNGALSDKTRFNLSRKAFSHTAQYDMISNYLTSDDVLSGTPEIAGFPGRFNQSWIKVQDMRYGE NPHQRAAFYRDIRDPAAGSLAAVKQLQKGELSYNNIADADAWEAVKSFDVPACIVKHANPCGVIAIASNTLDAYKL AYATDTSAFGGIIAFNREVDGATVKQITDNQFMEVLMAPKFTAEEALEIAAAKKNVRVLEVPLEAGANRFELKRGV GGLLVQTPTDIHRISRADLKVVSKRQPTEQEWNDLFFVNVAKYVKSNAIVFGGGQTYGIGAGQMSRVSDTRIAAR KAQDAGLDLNAGACAASDAFFPFRDGVDVIAEQGKAIHPAGSMRDQEVDAAEHGIAMVTGIRHFR
102	0997	MSASQLLSRLTQTVGEKYIITDPAKTEQYRQGYRFEGEKALAVVRPGSILEMWKILQACVEADVVIVITQAANTGLT GGSTPDGNDYDRDIVVNTPRMNIQTINNNNEQVVLCPGSTLNQLELLLKPLGREPHSVIGSSCIGASVLLGVCNN SGGLVALVORGPAYTEMALFAQINEEGRLELVNLGI DLGNTPEEILTNLQGHHYQNKDITQDAGKGHDHAYCEHVRQ VDEPTAARFNADPARHYEASCGACKLMFAVRLDTPQEKQTAVFYIGTNDINELDIRRAALGEFESLPVSGEYI HRHAFDIADVYKGDTFYVIKKFGTHQLPKLFDLKARVDRFGKKVSSLKHFSDKAMQFVSKFLPDHLPKSMRDYRD KYEHHILKMGKGKVDEARAFLKEYFAHHGGAFFECNAETQAAMLHRFAVASAIRYRAVHDDEVEDLVALDIAL RRDDDRWFKEKLPPEDIQNIIHKLYYGHFMCHVFHQDYI IKKGNDCMALEHEMLHLLDQRGQAQYPAEHNVGHLYEAK PALKFYRKLDPTNSFPVGKTSKKNWAE
103	1031	MTKHIAILRGDGIGPEIVAETVRVLDKLIAQGLADAYEYAPLGGEAYDEYGHPYPEFTQNLCKADAVLLGAVGSP QYDNLDRPLPERGLLAIRKDLNLFANLRPAVLYPELANASTLKEPEIVAGLDLILIVRELTGDIYFGEPRGIRVLEN GEREGYNTMKYSESEIRRIAHVAFQSAQKRSKKVCSVGKANVLETTELWREIEEIGKEYPDVELSHMYVDNAAMQ LVRAPKQFDVIATGNIFGDLILSDEASMLTGSIGMLPSASLDENGKGLYEPSSHGSAPDIAGQNKANPLATILSAML LRYSLNDEARAQVENAVQVQLQQGLRTSDIYEEGTKLVCSCMGDAVLAAL
104	1044	MAAFNTQKVLSVHHWTDAYFTFTCTRDESLSRFENGQFVMVGLMDKGKPLMRAYSVASANWEEHLEFFSIKVQDGPL TSRLQHLKVGGDDVLISKKPTGTLVAGDLNPGKHLYLLSTGTGIAFPANTSITKDPEIYEQFEKIILVHGVRYKKDLAY YDRFTKELPEHEYLGDLVKEKLIYPIVSREEFEHHGRLLTDLMSGKLFEDIGLPKINPQDDRAMLCGSPAMLKDT CKVLDDEGLTVSPKTGVRGDYLIERAFVDQ
105	1046	MKYISTRGETAHKPFSEVLLMGLAPDGGMLPEHYPOIGRETLDKWRLAYPELAFFEIMRLFVTDIPEDDLRDILN RTYTEAAFGTKEITPVRTLSDGKIKIQALSNGPTLAFKDMAMQFLGNAYEVLNKEGKLNILGATSGDTGSAEYA LRGKKGVNVFMLS PGDKMSAFORAQMSLQDENIHNIAVKGMFDDCQDIVKAVQNDAAFKEKYHIGTVNSINWGRI VAQVYYFAGYFNATSSNDETFSFCVPSGNFGNVCAHHIAKQMGLPIIRRLIVATNENDVLDEFFKTGAYRPRNSAH TYVTSSPSMDISKASNFERFVFDLMDRDPAEINTLWAevaAGKGFDLRFALDKVGKYGFTSGKSTHADR LATIKQ VYEQDQELIDPHTADGVKVAREVREEGEMVVCLETALAAKFDATIREAVGDAI PRPAALEGLENLPQRVQTPNS ADAVKGIIEQTLA
106	1053	MKKTVFTCAMIALTGAAAQELQTANEFTVHTDLSSISSTRAFLKEKHKAAKHSIVRADIPFDANQGIRLEAGFG RSKKNIINLETDENKLGKTKNVKLPTGVPENRIDLYGTYTQTLSDLNFRVGAGLGFESSIONKDSIKTTKHTLHSS RQSWLAKVHADLLSQLGNHWYINPWSEVFKDFLNSRYKLNTGVTNLKKDINQKTNWGFWGLGANIGKKLGESASIEA GPFYKQRTYKESGEFSVTTKSGDVSLTIPKTSIREYGLRVGIKF
107	1070	MTQTNRVIIFDTTLRDGEQSPGAAMTKEEKIRVARQLEKLGVDIIEAGFAASPGDFEAVNIAKTITKSTVCSLS RAIERDIRQAGEAVAPAPKKRIHTFIATSPPIHMEYKLKMKPKQVIEAAVKAVKIAREYTDDEFSCEDALSEIDF LAEICGAVIEAGATTINI PDTVGYSIPIYKTEEFFRELIAKTPNGKVVWSAHCHNDLGLAVANSLAALKGARQVE CTVNGLGERAGNASVEEIVMALVKRHDLFGLETGIDTQIVPSSKLVSTITGPVQPNKAIVGANAFSHESGIHQD GVLKHRETYEIMSAESVGWATNRSLSGKLSGRNAFKTKLADLGIELESEEALNAAFARFKELADKKREIFDEDLHA LVSDEMGSMNAESYKFISQKISTETGEEPRADIVFSIKGEEKRASATGSGPVDIAIFKAIESVAQSGAALQYSVNA VTQGTESQGETSVRLARGNRVNVNGQADTDVLVATAKAYLSALSKEFSAAKPKAQSGBTI
108	1073	MIKISTRFDAGSVVVVKDLTDPSNIRLALRPDNASDFAQWYFRLQGAAYQNCIMHFENAAAAYPKGWEQYACAS YDRRNWFRVPTS YENGVLTVNHTPLSN SVYYAYFEPYSEEQHNLNLGDAQGSLCRIDLGS TVQGRDINLLTIGN QVESDLKIWTARQHPGETMAEWFIEGLLGRLLDPQDPTARALLDRATFYI VPVNMPDGSA LGNLRTNAAGANLNR EWENPTVEKSPVFFVREKMLETGVDLFLDIHGDEGLPFVFGVAGTEGVPNYPNRPRIA ALEAQFKN ALLNAPDFQDE YGYEKDAPGEANMTLATNWVGNRFNCLAYTLEMPFKDNANLPDDDFGWNGQRSRLGEAALSAILNVIGDLR
109	1127	MATLSDKTI LVTGASQGLGEQVAKAYAAAGATVILVARHQKKLEK VYDAIVEAGYPEPFAICFDLISAEEKEFEHF AATIAEATQGKLDGIVHCAGYFYALSPLDQFTVAEWNQYRINTVAPMGLTRALFPLLKQSPDASVIFVGESHGET PKAYWGGFGASKAALNYLCKVADEWERFGNLRANLVPGPINSPQRIS KSHPGEAKSERKS YGDVLPAFVWWASAE SKGRSGEIVYL
110	1131	MALLQISEPGMSAAPHRHRLAAGIDLGTNSL V ATVRSGSAACLPDAEGRVTLPSVVRYLENGGIEVGK TALSAQK TDPLNTVSSAKRLIGRTLADLHQNTHYLPYRFGDNQRVIELHTRQGVKTPVEVAEILKTLKSRAEETLGGDLVGV VITVPAYFDDAQROATKDAARLAGLNLVRLNEPTAAIAYGLDNASEGTIVYD LGGGTFDVSVLQLTKGLFEVK ATGGNSALGGDDFDHRLFCRLL EQNGLSQLNEQDSQ LLSLVRAAKEQLTTQTEARIQATLSDGMAIDTSISRAEF HNLTQHLVMK TLEPVTOALKDAGVGKNEVKGIVMVG GSTRMLHVQOAVATFFGOTPLNNLNPDEVVALGAIAQANV LAGNKTDGEWLLDVTPLSLGLEYGG LAEKII PRNSTIPTARAODFTFKDQTA MТИHVVQGERELVADCRSLA KFTL RGIPPM AAGAARIRVT FQIDADGLLSVSAQEQSTGVQAQIEVKPSYGLDDDTITQMLKDSMSNAEDMAARA

		RAEAVVEAESLTDVNAALELDSDLDAEELQQIROGIADLQGRLKDGKAEDIAAAALGSITDNFAAKRMNRNI QRALTGQSVDN1
111	1150	MPEYRSKTSTHGRNMAGARALWRATGMETDFGKPIIAVANSFTQFVPGHVHLHNMGQLVAREIEKAGAIKEFNT IAIDDGIGAMGHSGMLYSLPSRDLIADSIEYMVNAHCADALVCISNCDKITPGMLIAAMRLNIPТИFVSGGPMEAGK VIGVANIQPERRLDLIDAMIESADDNVSNRQVEEVEONACPTCGSCGMFTANSMNCLEALGLSLPGNGSYLATH AGRKEFLFLEAGRMIVEITKRYYEQNDETVPRTSIATKKAFENAMTMDIAMGGSTNTILHLLAVANEAGVDFKMDI DRLSRVVPICKTAPNNHDYYMEDVHRAGGIFAILKELDKAGKLHTDVHTIAPTLKDAIEQWDVTNPENTRAIER FKAAPGGVRTTQAFSQNRMWKTLDLDRKGCI RDVAHAYSDGGLAVLFGNI AERGCVVKTAGVDESILKFTGRAR VFESQEDAVEGILGNQIVAGDIVIIRYEGPKGGPGMQUEMLYPTSYLKSKGLGKACALLTDGRFSGTSGLSIGHAS PEAAEGGAIGLVHEGDTVEIDIPNRSIH LAISDEELAARRAEMEARSKAWPKNDRYVSAALRAYGAMATSADK GAVRDVAQIER
112	1201	MRIVEKAYTFDDVLLVPAHSTVLPRDVKLOKLTREITLNPLLSAAMDTVTEARLAISMAQE GGGIGIIHKNMPPE MQARAVSKVKRKHESGVVKDPVTVAPTTLIREVLEMR AQRKRKMSGPVENGKVVGIVTNRDLRFENRVDPVSAI MTPRERLTVPEGTSIDEARELMHTHKVERVLVNEKDELKGLITVKDILKTTEFPNANKDSEGRRLRVGA AVGTGG DTEERVKALVEAGVDVIVVDTAHGHSQGVIDRVRWVKETYPHIQVIGGNIATAKAALDLVAAGADAVKVGIGPGSI CTTRIVAGVGVPQLTAIHNVAEALKGTGVPLIADGGIRFSGDIAKALAAGAYSVMLGGMFAGTEEAPGEIELYQGR SYKS YRGMGSLGAMSQGSADRYFQDKTDSTDKYVPEGIEGRV PVYKGPIVNI IHQLTGGLRSSMGYLGCANIAEMHE KAEFV EITSAGMSESHVHDVQITKEAPNYR
113	1206	MKGDRLVIRELNKNLGLLVTINQYFLHARILKNWGFEELGEHFFKQSI VEMKAADDLIERILFLEG LPNLQELGK LLIGESTEEI IACDLTKEQE KHEALLAAIATAEAQDYVSRLLEKQKD'TNEEHIDWLETQELIGKIGLPNYLQT AAQED
114	1228	MKPVNIGLLGLGTVGGGTAAVLRDNAEI SRRLGREIRISAVCDLSEEKAROTCP SAAVFKDPFELVAREDV D VVV ELFGGTGIAKDAVLKAIENGKHTANKKLLAEYGNEIFPLAEKQNVIVQFEAAVAGGIPIIKALREGLAANRIKS IAGIINGTSNFILSEMREKSAFADV LKEAQA LGYAEADPTFDIEGNDAGHKITIMSALAFGTPMNFSACYLEGIS KLDSDRDIKYAEELGYRIKLLGIRKTKGIELRVHPTLIPESRSLIANVNGVMNA VRVNADMVGETLYY GAGAGALP TASAVVADII DIARLVEADTAHRVPHLA FQPAQVQ AQTILPMDEITSSYYLRVQAKDEP GTI LGQIA ALLAQENVS EALI QKGVIDQTTAEIVILTHSTVEKHKSIAAAIEALDCVEK P T MIR MESLHD
115	1231	MTQKEKHFEYYAALATPLR D VVVYPHMVLPLFVGRPKSIAALENAITREEPVFLA QTDAVEEPIAADLYQTGT VAQVLQVLKLPDGTVKV1VEGLYRGRVLTIEDTGGFLVSHIETVVEEDTGGNTDLEAVRRTLLAQFEQYAKLNK PAEIIIGSINGIAENSRLTDVTAAHLQLKLAQRQQILEIPEIGKRMFLLAQLESEL DIMQA EK RGRV KRQMEKS QREYYLNEQIKAIHKELGEEDENGELDAEADIKKAGMTKEAEEKCLSELKKLKMMPMSAESTVVRNYIDTLL PWKKKSRVSKDIAKAGLVLADHYGLEKVKERILEYLA VQKRM DKLKGPILC LVGPPGVGKTS LGESIAKATGRKY VRMALGGVRDESEIRGHRTYI GMS PGK IQLQMAKAGV KNPLFLD EIDKLGNDFRGDPASALLEVLDPEQNNKFA DHYA EV DYDLS DVMFIATNSNLNIP TPLLDRM EII RLS GY TEDEKINIA MOYLVPKQM KRN GVKE GELA IEEA SVR DII RYYTREAGVRS LDREIAKICRKV VMQ ITL DEDKKR LSETK KTS KAKPKAVKVNEK NLHD YLG VRR FDYGV AES ENRIGQVTGLAWTEVG GELLTVEAA ALPGKGV I QCT QLG DVM KES VSAWS VRS RAES VGLAPDFY EK DI H VPEGATPKD GPSAGI AMTIAA S AFT KIP VR ADV AMT GEIT LRGEV LPI GGL KEK LLA ALRG GIKH VLI PKD NV KD LEEI PEN VKT GLT IHPV KWI DEV LAL GLE SQPEP WAE PSG A AAE SASKPK PRS RAT KH
116	1240	MISTNGITMQFGAKPLFENVS VKFG EGN RYGLIGANGSGKSTFMKILGGDLEQTA GEV A IENG VRLGKL RQD QFAY EDMRVLDVVMGMHT EMWA MTER DAI YAN PEATEDDY MKA AE LEAK FAE YD GY TAE ARAA ELL SGVG ISE DLHN AK MAEVAPGFKL RVLLA QALFSKPDV LLL D EPTNNL D INT IRWLEG VL NQYD STM II IS HDRH FLN EVC THM ADL DYN TITI YPG NYD DYML AS AQS RER AL KDN AKA EKL QLQEF VAR FSANK SKAR QAT SRL KQAD KIK SEM VE VP KSTR QNP YIR FEADE KAKL H RQ AVE VE KLAK R FET QL FK NLN FILE AG QRL A I I GPN GAG KST LLK LLAG AY NPE YSD GL LPDEGT IKWAEKASVG YYPQ DHEN DF DV DMDL SE WMR QW GQ EG D E QV IRG TL G RLL FG S ND VV KK V KVL SG GE KG RML YG K L L L KPN V L V M D EPT NH M D M E S I E S L N M A L E K Y N G T L I F V SH DRQ FV S S L A T Q I I ELD G K G G Y E H Y L G D Y E S Y L E K K G V A
117	1252	MSTSLSYRDAGVDIDAGDQLVENIKPFAKRTMRPEV LG D L G G F G A L V E I G K K Y Q N P V L V S G T D G V G T K L K L A F D W D KHDTVGIDL VAMS VND ILVQGA EPL FFLD YFAC G K L D V P R A T D V I K G I A Q G C E E S G C A L I G G E T A E M P G M P V G E Y D L A G F A V G V V E K E N V I T G R S I G V G D V V L G L A S N G A H S N G Y S L I R K I I E R D N P D L D A E F D N G K T L R E A V I A P T R L Y V K P I L A A L E K F T I K G M A H I T G G G I T E N V P R V L P E N T V A Q I D A K S W E L P K L F Q W L O K A G N V E T Q E M Y R T F N C G I G M V V I V A A E D A D A V Q G L L G E Q G E T V Y R L G L I R R E R Q D E H Q T Q V A
118	1301	MSMENFAQOLLEESFTLQEMNPGEVITAEEVAIDQN FVT VNAGLKSES L IDVAE FKNAQGEIEVKVGD FVTV TIESV ENG F GET KLS REK A RAAD WIA LE EAM ENGD ILS GI ING KVKG GL TV M ISSIR AF LPG S L V D V R P V K D T S H F E G K E IEFKV I KLD KKR NN V V S R R A V L E AT L G E E R K A L N L Q E G S V I K G I V K N I T D Y G A F V D L G G I D G L L H I T D L A W R R V K H P S E V L E V G Q E V E A K V L K F D Q E K Q R V S L G M K Q L G E D P W S G L T R R Y P Q G T R L F G K V S N L T D Y G A F V E I E Q G I E G L V H V S E M D W T N K N V H P S K V V Q L G D E V E V M I L E I D E G R R R I S L G M K Q C Q A N P W E E F A A H N K G D K I S G A V K S I T D F G V F V G L P G G I D G L V H L S D L S W T E S G E E A V R K Y K K G E E V E A V V L A I D V E K E R I S L G I K Q L E G D P F G N F I S V N D K G S L V K G S V K S V D A K G A V I A L S D E V E G Y L P A S E F A A D R V E D I T T K L K E G D E V E A V I V T V D R K N R S I K L S V K A K D A K E S R E A L N S V N A A A N A N A G T T S L G D I L L K A K L S G E Q E

119	1302	MTKSELMVRLEA VFAAKNGTHLLAKDVEYSVKVLVDTMTRS LARGQRIEIRGF GSF DLNHRPARIGRNP K TGERVE VPEKHVPHF KPGKEL RERV DALKENAN
120	1313	MMSVT VETLENLERKVVLSLP WSEINAETDKKLKQTQRRAKIDGFRPGKAPLKMIAQMYGASAQNDVINELVQRRF YDVAVAQELKVAGFPRFEGVEEQDDKESFKVAAIFEVFPEVVIGDLSAQEVEKVTASVGDAEV DQTVEILRKQRTR FNHVEREARNGDRVIIDFEKGKIDGEPFAGGASKNYAFVILGASQMLPEFEAGVVG MKAGESKDVTNF PEDYHGKDVA GKTAVFTITLNNVSEATLPEVDADFAKALGIADGDVAKMREEVQKNVSREVERRVNEQTKE SVMNALLK AVELKA PVALVNEEAARLANEMKQN FVNQGMADAANLDLPLDMFKEQAERRVSLGLILAKLVDENKLEPTEEQIKAVVANFA ESYEDPQEVIDWYADPSRLQAPTS LAVESNVVDFVILGKAKVNEKALSFDEV MGQA
121	1320	MQIILLEKIGGLGNLGDIVTVKNGYARNFLIPAGKAKR AT EANMKEFEARRAELEAKQAEI LADARVRQEKL DGQT VTV A QKAGV DGRFLFGS VTNADIAAAIAVAGIEAVKANVRLPNGLPKAVGEYEVEVALHTDAVAKITVAVVAATE
122	1323	MRHYEIVFIVHPDQSEQVPM VERY KTMIAEANGKIH RLEDWGRQLAYPINKIHKAHYVLMNIETTPEVVEELET AFRFN DAILRHRLTIKTKHATVTEAS PMLGGEKAKNLLSGASEEEAVAQ
123	1324	MSQHRKLIILGSGPAGYTA AVYAARANLPVIITGIAQGGQLMTTTEVDNWPADAGVQGP ELMARFLAHERFGT EII FDQINAVDLQKRPTLKGDMGEYTC DALI VATGASAKYLGLPSEE AFAGKGV SACATCDGFFYKNQDVAVVGG GNTAVEEALYLANIAKTVTLI HRRSEFRAEKIMIDKLMKRVEEGKII LKLESNLQEV LGDRGVNGALLK NNDGSE QOIAVSGIFIAIGHKPN TDIFKGQLEMDEAGYLKTKGGTADNVGATNIEGVWAAGDVKDHTYRQAITSAASGCQAA LDAERWLGSQNI
124	1328	MTDTAENQ TQNNWQAGHPRSIRS FVLRQSHMTAAQORAIDTLWDSFGIDYQATPADLDARFGSSRPKILEIGFGMG TATAEIARRLPETDFLAIDVHGPVGVNLLKLIDENHLENIRVMRHD AVEV VENMLQDGS LDGIHIFFPD PWKKRH HKRRLIQAPFI A KLLPKLKTGGYIHLATDWE EYAQ QMLEV LSSFD SLQNTAADYAPTPDYR PETK FEAR GKRLGHG VWDLVFKRIG
125	1339	MKA S QFFFISTLKEA PAEA ALASHKLMIRAGLIKANAS GLYT WMPMGLRVLRKVENVVREEMARAGSVELLMPVVOP AELWQESGRWEFYKGELLRLKDRH DRFCM GPT CEEVIADIVRKEINSYKQLPKFNFYHIQTKFRDEVPRPFGVMRA REFVMKDAYSFHADYASLQTTYQDMYDAYCRI FTRLGLA FRPVADTGSIGGTGSHEFQVLAESGEDVIA YSDTSD YAANIELAPT LPLKGERAAQAE LVK VHTPNVKTIDS LVDL S IPIEKT LKSIVV EGENE GEL ILLL RGDHEFND IKA EKLAGVKSPLT MASPAAI VEQFGANGGSLGPVG FAGK VYAD FATEKGADW VIGANEDDYHTGFNFGRDAAEP EFV DLRN VVEG D E SPDGQGRKLARGIEVGHV FQLRDKYTQAMNVF LDNNNGKSQIMEMG CYGIGITRVVAAAIEQ NNDEKG IWT KAMAPF E VVIVPM NYKKS DTVREA ADKIYAELLAAGD VLL DDR DERAGV LNDSELLG I PHRIVI GDRALKEGNVEY AERRDNEAQAVAIGEIVARV TASLNA
126	1341	MSTQLHDVDPIETQEWLDALSSVLEYEGGERA QYLLEN LVKYCRDKGV RM PHGTTTPYLNTV S VEN EKG I PGDQ NI EHRI R AFV RWNAA AIVL RAGKKDLELG HIASF QSAATM YEVG F NHFWKAKGE GE EGD L VFQGH VAPG I YARAFV EGR LT EDQ LNN FRQEV DGHG LPSYPH P HLLP DF WQF PT VSM GLG PIMA YQARFLK YLES RGLAKT KGRK VWCFCG D GEMD EPE S QGA I A LAAREG LDN LI FV INCN L QRLD GPV RGN GKKI I QELEG NFAGAGW NVV KVI WGR RWD RLLA KD KDG ILR QRM EEC LD GDY QTY KSKD GAY VREH FFNTPEL KALVAD MTD DE QLW ALN RGG HD P QK VY NAY DRAA ND G KPTV I ALTI KG YGM GASE GEG QNVA HQAKMDK ASLK QFRDRFDI PVT DE QIES GDL PYLT FAPD TE EY KYLH ARR DALGGYL PQRKPT QEV L VPEL SA F DQL KSS GERE FSTTMA FV RIL ST LLK DKKI G KR VV PIV P D E SRT FGME GM FRQ YGI WNP KQ QYTP QDKD QLMF YKES VDG QI L QEG IN EPGAMADWIA AATSYAN SFAM IPF YI YYSMFGF QRI GDLAWAAGDMHARGFLLGGTAGRTT L NGE GLQHEDGH SHI QADL I PNC VSY DFT QYEV AVIV QDGL RR MYANNED VFYYITLMNENYTH PDM PEG AEQ DILK GM YLLKAGGKG DKKV QLMG SGT I L QEV I AG ELLKADFG VEA DI WSCPS FNLLH RDAVEVERFN RLH PLEAKV PFTV SQLQH DGPVIAATD YIRSYAD RIRAYI PNDYHV LGTDG FGRSDS RA NLRRFFEV DRYN VAVA AAL A LAEQ GK VSKETVQQ AIE KYG IKA DAPS WKR
127	1342	MSIVEIKV PDI GG HEN DII AVEVKAGDTI A VDDT LITLETD KATMDV PADAAGV VKEV KVKG DKI SEGG VILT V ETGAAA AEEAAPAAA EAQPA PAA PAAAGGATVQ VAPD IGG HTD VD V AEDDT LITLETD KATMDV PCTAAGV V KAVFLKVG DKVSE GS SAI IEVETV GSAAA PAQAA QAA PAA APP TAA PAAP A PAP S APA AAKIDEA AFAKA HAGPSARKLARELGV D LQVKG TGLK GRIM DD I KAFV KS V M QGGA K PAA ASAS LGG GLD L LPW PKV DFS KFGNVEVK ELS RIKKIS QNLSRN W VV I PHV TVHEADMTELEEF RK QLN KEWEREGV KLSPLAFI IKA VSALK A FPEFNA SLDG DN LVLK NYF NIGFAADT PNGL VVPV I KDV DQ KGLQ I S QEL TELSK KAREG K LKPQEM QGAC FT IS SLGGIGGTGFPTIVNAPEV AILGVCKS QIKP V WNG KEFAPR LM CPLS LS F DHR V IDG AAGM RFTVFLA L LKDF RR ITL
128	1343	MGNFLYRGISCQD E QNNQQLKPKGNKA EVAIRYDGKFKYDGKATHGPSVKN AVYAHQIETGLYDG CYI STT DKE IAKK F ATSS G IEN YI YV LNR DLF QY S I FEY E VEH PNEKEV TIRAE DC C IPEEV II A KELIE IN
129	1344	MALV E KVPDI GG HEN DII AVEVN VGD TIA VDDT LITLETD KATMDV PAEAVG V VKEV KVKG DKI SEGG LIVV V EAEGTAA PAK AAAA PAQ EAP KA A PAQ PAQ AAQFG GSADA EYDV V VLGG PG GY SAA FA AAD EGLK V A J V ERY KTL GGVCLNVGCIPSK ALLHNAA VIDE VRHLAANGI K YPEPEL D IDMLRAYKDG VV SRLTGGLAGMA KSRK VD V IQGDG QFLDPHH LEV S LTAG DAY E QAA P TGEK KIVAFKNCIIAAGSRVTKLPF I P D E P R I I D S S G A L K E V P G K L L I I G G G I I G L E M GTV YSTLGSRL DV VEM MDGLMQGAD RD L V KVW QK QN EYRF D NIM V N T K T V AVE P KEDG VY V T FEGAN AP KEP QRYDAV IVAAGR A P N G K L I S A E K A G V A V T D R G F I E V D K QM RTN VPH I A I G D IV QPMLAH KAV HEGH VAA EN CAGH KAYF DARV I P G V AY TSPEV A W VGET ELSAKA SGR KIT KANFPWA ASGRAIANGCDNGFTKL IF D AETG RII G

		GGIVGPNGGDMIGEVCLAIEMCDAADIGKTIHPHTLGESIGMAEVALGTCTDLPPQKKK
130	1347	MNPFLNTAFKAARRAGOMMIRAAGNLDVAKTDSKAFNDFVSDVDRNSEIILVEALKEAYPHHKITCEESGSHGKAA AEYEWIIDPLDGTTFNLHGHPOYAISMALLHKGVLQEALVYAPERNDVYMASRGKGALLNDRRIRVSNRIELNRCL IGTGFPVVDQSMMDKYLAILKDFLAKTAGGRREGAASLDLCAVATGRFDGFFEFNLKPWIDIAAGALIVQEAGGI DMSEDGWLESQDIVAANPKVLAQMLKIIISAHV
131	1356	MTQYTLKQASVLLQSKQISAVELASAYLAAIAEKNPALNGYITIDQDKTLAEARAADERIAQGNASALTGVPVAYK DIFCQTGWRSAACASKMLDNFISPYTATVVQNLLDEGMVTLGRTNMDEFAMGSTNSFYGAAKNPWNLEHVPGGSS GGSAAVVAARLAPAALGSDTGGSIROQASHCGITGKPTYGTVSRCMVAYASSFDQTPGMAQTAEDCAIILNAMA GFDPKDSTSLEREKEDYTRDLNQPLKGLKIGLPKEYFGEGRNSADVLTALQNTIDLKAQGELIEVSLPQTKLSIP AYYVLASAEASTNLSRYDGVRYGHRAAQFADLEEMYKTRAEGFGSEVKRIMIGTYVLSHGYYDAYYLKAQKLRR LVADDQTAFARCDLILAPTAAPKIGADASPETYLDIYTIAVNLAGLPALTPAGFSGGGLPVGVQLVGNY FAEAKILGAAHQIQLNSDHGKRPE
132	1358	MTWETVIGLEIHVQLNTKSIFSGASTAFGAEPNAHASVVECALPGVLPVNMREVVEKAIKLGLALDAKINQKNVF DRKNYFPDLPKGYQISQQLDPIVEHGLEIVVGDVKTINVTRAMEEDAGKSVHEGLNGATGIDLNRAGTPLLE VVSEPEMRSAEAVAYAKALHSLTVLDICDGDNMAEGSFRVDANVSRPKGQEEFGTRREIKNLSFRFLEQAINY EAEAQIEILEDDGGKVQQATMLFDPEKGETRVMRLKEDAHDYRYFPDPDLPVIISDAQMOKKAEMPELPKEMAAR FVADYGVSEYDARLITASRAQAAYFEEAAKESGQGKLTANWMNGELAALNKEGMELADSPITAPRLAALVGKIAD GTLSSKLAKKAFEAMWAEEPATIAEIIEKHGLQOMTDTGIEAMVDEVLANAKAVEQFKSGNEKALNAIVGQVMK ASKGKANPAQVQELIKAKLA
133	1372	MSNENRTCSFCGKSKSHVVKHLIEGENAFICDECVCNCIEILHEDGNDGTPSESAGGEPEESGKLPTPAEIVANLD HVIGQEAKKALAVSVYNYKRLRHPKAGANVELSKSNILLIGPTGSGKTLLAOSLARKLDVLPFMADATTLEAG YVGEDVEQIITKLLGKCDFTDVEKAQRGIVYIDEIDKISRKSDNPSITRDVSGEVGQQALLKLIETGVASVPPQGGR KHPNQEFINVDTTNIFCIGGAFAGLEKVRTEKGGIGFGASVHSKDENADITKLFGLIVEPEDLIKGLIPELI GRLPVIATLELDEDALINILTEPKNALVKQYQALFGMENVELEFEAGRSIARQAMERKTGARGLRSIVERCLL DTMYRLPDLKGLKKVVVGKAVIEEGREPELVFES
134	1379	MTVKTPTVLDYATPPVDKRVAEKMPIYLTETFGNPASNHSFGWEAEEAVEKARADIAALINADSKEIVFTSGAT ESNNLAIKGAAHFYKSKGNHLITVKTENKAVLDTMRELERQGYEVTLVDQENGVLVDLVKAIAIREDTILVSVMW VNNEIGVVQDIIPAIGEICRERKIIFHDAAQACGKVPDVAAKVDLLSMSGHKVGPKIGALYVRRKPRVRLEA QMHHGGHERGFRSGTLPHTQIVGMGEAFRIAKEELAQDTAHYLKLDRIFLKGIEGIEEVYINGDLEHRVPNNLNVS FNFVEGESLIMAVKELAVSSGSACTSASLEPSYVLRALGRNDELAHSSLRITFGRMTTEEVQFAELIKSKIGKL RELSPLWEMFKDGIIDLNSIEWAHH
135	1390	MSSTPNKQAGYPRLVADIGGTNARFALETAAPRVIEKAAPVLPCKDYDTVTDRAVRAYLNQSGATAVRHAAFAIANPIL GDWVQMTNHHWAFSIEETRQTLGLDTLILLNDFTAQALAVTQTSKDLMQGGQKPVEFAPKAVIGPGTGLGVSGL VHSHAGWVALAGEGGHTSFPPFDDMEVLIWQAKNKYGHVSAERFLSGAGLSLVYEALAAKQAKPAKLMPSITE KALSCASPLCRQTLIDFCAMLTGTVASNLAITLGARGGVYLGGIIPRVELEYFKTSPFRSRFENKGRFEAYLAAIPV YVVLSEFPGISGAAAALDNHLRNV
136	1392	MSTQTNFDLVLFGATGDLAMRKLLPCLYQAHVAGLLHPEGRILGVSRSLEDTEGFLAKVETSSKIHVKENFSDEAW ASFVERFAYLKVDVTQPDDFAALGDLVKARKETDNVVIYLSTAPKFFAQACENLAAIGLNADNVRVLEKPLGTDL ASSQQINTDVARYFKEGQIYRIDHYLGKESLQNLALRNFANVMFEPWLNNKYIESVQLTIAEQLGVEEERGEFYDIT GALRDMVQNHLQMQLCMTAMEAPASLDADEKVKVVIKSLKPLTVESVNENVRGQYTAARGMNGYLEEINVPQ DSFTETYVAIAKAEIENERWKGVFYLRTGKRMAGKVAEIVLNFKDLNSHIFEGRSRTAPNRLVIELQPYESVRLYTO MKTPGAGNKVETVPLATDLGKALEGRRAEAYERLLLIVINGKLALFNRRDELEAAWEYVMPILENWTNNTPPHGY GAHSGWPEAARELLARDGHKWHEEQ
137	1425	MSEONHPQTEPQLDENQIIALRREKLHNIRQQRNAYPNDFKRDFAADIHLAQYGEIGKEELDPQGIPKVAGRMML KRQMGKASFATIQDVSQGQIQLYLNNGVSQEVLDFFNHWDLGDIVGAEGTLFKTNHGELTVRSGIRLLSKSLRPL PDKHKGSLDQETKRYQRYVLDIANEESRNTFIKRSQIIOQSVRNFMVGEHYLEVETPMMHPIPGGATAKPFVTHHNA LDIPLYLRIAPELYLKRLVVGGLERVFEINRSFRNEGMSVRHNPEFTMIEFYEAFSDYERMMQMAEDIIRNASRTV NGTANITYNGKEVDLESFPERLTILEAIKKYNPHYTDEQLNDAEWLKKEIVKHGESLPPSPGIGSLQLALFEGCAE GKLWNPTFIVDYPVEVSPLARASDTKQGLTERFELFVVGRELANGYSELNDPEDQAEFRKAQVQKDAAGDDEAMHY DADYIRAMEFGLPPTGGGIGIDRLVMLLTDQIIRDVILFPQMRPE
138	1429	MRKKLTALVLSALPLAADVSLYGEIKAGVEGRNYQLQLEAQAAQNGASGQVKVTKVTAKSRIRTKISDFGSF IGFKGSEDLGDLKAWQLEQDVSVAGGGATQWGNRESFIGLAGEGFTLRAGRVANQFDDASQAIIDPWDSSNNDVAS QLGIFKRHDDMPVSVRYDSPEFSGFSGSVQFVPIQNSKSAYTPAYYTKNTNNNLTVPAVVGKPGSDVYYAGLNK NGGFAGNYAFKYARHANVGRNAFELFLIGSGSDQAKTDPLKNHQVHRLTGGYEEGGLNLALAAQDLSENDDKTK NSTTEIAATASYRGNAVPRISYAHGDFIERGKGENTSYDQIIAGVDYDFSKRTSAIVSGAWLKRNTGIGNYTO INAASVGLRHKF
139	1445	MSDDKSKALAAAQIEKSFKGKAIMKMDGSQQEENLEVISTGSLGLDIALGVGLPRGRIVEIFGPESSGKTTLC LEAVAQCQKNGGVCAFVDAEHAFDPVYARKLGKVEELYLSQPDTCGEQALEICDTLVRSGGIDMVVVDSVAALVPK

		AIEEGDMGDSHVGLQARLMSQALRKLTGHIKKTNTLUVFINQIRMKIGVMFGSPETTTGGNALKFYSSVRLDIIRR GSIIKGEEVLGNETRVKVIKNVAPPFRQAEDILYGEGLISWEGELIDIGVKNDIINKSGAWSYNGAKIGQGKDN VRVWLKENPEVANEIDAKIRALNGVEMHITEGTQDETGERPEE
140	1452	MQNIFDPLVIRGKSLTPIVQGGMVGVSASGLSSAVARENGIGTIASVDLRHLHEDLLAESQINPSEEKYTSLNCT ALDREIQKAKSASEGKGGLIAVNVMKAVKDHAAYVRQACESGADAVVMGAGLPLDLPMTTEGYHKDVALLPILSESR GINIVLKRWMKKGILPDAIVVEHPAHAAGHLGASTVEGVNDAKFDFKRVIEETFEVFKSLGLESEKIPLILAGGM NFEVKVTALKNWGASAVQIGTAFAVTEEGDAHNFKTLAGAETEKVVVFMSVAGLPARGVRTKFLLSYIKRESKL QTNAKADPRRCTQGLNCLTSCGLRDGLSKAGQFCIDIQLAAFRGEVDKGLFFRGDKRCPSAMPSAPSARRYNIC
141	1457	MSQLANAIRFLSADAVQKANSQHPGAPMGMAEMAETLWTFLNHNPNPKFYNRDRFVLSNGHASMLLYSLLHLTG YNLSIEDLKNFRQLHSKTPGHPEGYTDGVETTGPGQGIANAVGMALAEKILAEEFNKDGZNIVDHYTYVFMGD GCLMEGVSHACSLAGTLGLGKLIVLYDDNNISIDGKVDFWTENIPQRFESYGHVVPNVNGHDTAAIQAAIEAA RAETGKPSIICCKTLIGKGSANKESHKTHGAPLADEIEATRKHLGWTYPAFETPQEYDAWNKEQGAKLEADW NELFAQYQAKYPAEEAFVRRMDKLPDNFDEYVQALKEVCAKAETIATRKASQNSIEILAKELPELVGGSADLT PSNLTDWSNSVSUTRDKGNNYIHYGVREFGMGAIMNGLVLHGGVKPFATFLMFSEYERNALRMAALMKINPVVF THDSIGLGEDGPTHQPIEQATLRLIPNMDVWRPCDTAESILVAWAEEAVKAADHPSCLIFSQNLFQARSEQOLND IKRGGYVISEAQGNAQAVIATGSEVELALEAQKALAAQNIARVVSMPSTNVFDRQDAAYQAAVLPEGLPRIAVE AGHADGWYKVYGLNGAVVGINRGESAPADLLFKAFGFTVDNVVDTVKSVL
142	1471	MSKKRVLTVGTTGIPHGLNYVGAIARPRAAAQNLDTESFLFLADYHGIICKHEPEMIHQSTQAVAATWLACGLDP ERTTFYRQSDTPEVMELNWLTCITAKGLMNRAHAYKAQANAENGQEDPDFGVEMLFSYPILMTADILMFNAN EVPVGRDQIQHMEMARDIAGRNFNHRFRELFTLPEVKIDENVELVGLDGRKMSKSYGNTIPIWENDKKTQSVNKI ITNMKEPGEPKQPDESPLFEIYKAFSTPSETVEFTKMLADGLAWGEAKKLLAAKINAELAEPRERYNELTADPSQI EEILQAGAAKARKEARELLDKVRDAVGIRPLK
143	1472	MYDKLTAKFQQALAEAQSLSALAADGSYLEAGFVLKALLDDQNSGAAALLAHAGVNVPQVKQRLQQHLSLPKVSG QGGDILPSRELQAVLNLMDKAATKRSDAYIASELFLALVQONDATGKILKEAGATEQNINAAIDAVRGQVNDA NAEDQRDAKKYTLDLQRARDGKLDPVIGRDEIRRAIQVLQRRTKNNPVLIPEGPGVKTAIVEGLAQRIVNGEV PESLRNKRLVLDLAALIAGAKYRGEFEERLKGVNLNDLAKDDGNTLIFIIDEIHTLVGAGKTDGAMDAGNMLKPALA RGELHCIGATTLDDEYRQYEIKDAALERRFKVVLVGEPSVEDTIALRGLQERYEIHHGIDITDPAVAAAELSDRY ITDRFLPDKAIDLIDEAASRVKMEKETKPEAMDKIDRRLIQLRMKEAHVEKEKDDASKRLEIDEEINGLQKEYA DLDEIWKAIAISDGAANIKKQIDEVKIKIEQAKRQDGLALASKLIMYEDLEHLEKQRAAAERADTDSTKPANKLLR NNVGAETIAEVVSRMTGIPVSKMMEGERDKLLMEEVLHRRVVQGDEAVRAVSDAIRRSRSGLADPNKPYGSFLFL GPTVGKTELCKALAGFLFSEDHLIRIDMSEYMEKHAVARLIGAPPYGYEEGGYLTEQVRRKPYSVILLDEVE KAHDVFVNILLQVLDDGRLTDQGRTVDKNTIVMTSNIGSQHIQOMGIQDYEAKEVVMEDVKEHFRPEMINRI DEVVFHGLDQDNIRNIAKIQLKGLEKRLEQNLRLAVSDAALDIIAKAGFDPIYGARPLKRAIQSEIENPLAKAL LAGNAYAPESEIRVEADGDRLKFA
144	1506	MNLHQTVHEAAAFAAAGIADSPIVLQPTKNAEHGDFQINGVMGAAKKAKQNPRELAQVVAELADNAVIESAEV AGPGFINLRLRPEFLAQNIQATALNDARFGVAKTDKPTVVVIDYSSPNLAKEMHVGLRSSIIGDSISRVLAFMGNT VIRQNHVGDWGTFQGMLVAYLVEQQKDNAAFLADLEQFYRAAKVRFDEDPAFADTAREYVVKLQGGDETVLALWK QFVDISLSHAQAVYDTLGLKLRPEDVAGESKYNDDLQPVVDDLVQKGLAVEEDDGAJVFLDEFKNKEGEPAAFIVQ KQGGGFYASTDLACLRYRIGRLKADRLLYVVDHQRALHFQLFTTSRKAGYLPEVGAFIGFTMMGKDGPFK TRSGDTVKLVDLLTEAVERATALVKEKNPELGADEAAKIGTKVGIAVKYADLSKNRTSDYVFDWDAMLSFEGNTA PYLQYAYTRVQSVFRKAGEWDANAPTVLTERPLEKQIAAELLKFEDVLQSVADTAYPHYLAAYLYQIATLFSRFYE CPLKAEGASRNSRQLAKLTGDTLKQGLDLLGIDVLDV
145	1518	MSQKLILVLNCGSSSLKGAVLDNGSGEVLLSCLAEKLNLPDFAYITFKVNKEKHKVDSLHAPDHGTAVEALMEEKA HGLDSRIGAIGHRVVSGGELYSESILVDEVIAGIEKCIPALPLNPAAHLLGLRAAQSIFKGLPNVVFDTSFHQT MPEVAYKYAVPQELYEKYGLRRYGAHTSYRFVAETARFLGKDCKDLRMVIAHNGNGASITAVANGESRTSMGL TPLEGLVMGTRSGDIDPSVFCFLAENANMTIAQITEMLNKKSLLGI SGLSNDCRTIEEEAKGHKGAKLALDMFI YRLAKYIGMSAVAAGGLDALVFTGGIGENSIDI RERIVIGYLGFLGLNIDQEANLKARFGNAGVITTADSKAVAVVI PTNEELMIAHDTARLSQL
146	1533	MKAYLALISAASVIGLAACSQEPAPAEEAATPAAEAPASEAAPAAEAPADAEEAPAAGNCATVESNDNMQFNTKDI OVSACKEFTITLKHGTQPKASMGNLVIKAEDMDGVFKDGVGAADTDYVKPDDARVVAHTKLIGGGEASLTL DPAKLADGEYKFACTFPFGHGAALMNGKVTLD
147	1536	MLTNIAKKIFGSRNDRLLKQYRKSVARINALEEQMQLSDADLQAKTAEFKQRLADGQTLGILPEAFAVCREASR RTLGMRHFDVQLIGGMVLHDGKIAEMRTGEGKTLVATLAVYLNALAGKGVHVTVDYLASRDAGIMEPLYNFLGL TVGVIIISDMQPFDRQNAAYADITYGTNEFGFDYLDRDNMVTDQYDKVQRELNFAVVDDEVDSILIDEARTPLIISGQ ADDNIQLYQIMNTVPPHLVRQETEEGEGDYWVDEKAHQVILSEAGHEHAEQILTQMGLLAENDSLYSAAJIALMH LMAALRAHSLFHKDQHYVIQDGEIVIDEFTGRLMSGRWRSEGLHQAVEAKEGVEIKRENQTLASITFQNYFRLYT KLSGMTGTADETEAFEFQSIYNLETVIIPTRNPVQRKDFNDQIFRSAEAKFEAVVKDIEECHKRGQPVLVGTTSIEN SELVSKLLTQAGLPHRNVLNAKEHEREALIVAQAGKVGAIIVATNMAGRGTDIVLGGNLKHQTDIARADETLSDEEK QAQIAALEDGWQAEHDVKMEAGGLHIIGTERHESRIDNQLRGRSGRQGDGPSSRFYLSFEDPLLRLFALDRAAAI

		LNRLAPERGVAIEHNLTRQIEGAQRKVEGRNFDMRKQVLEYDDVANEQRKVIIYSQRNEILTSKDISDLQEIRSD VVSDLVDTYMPDSMEEQWDIPTLENRLAAEFLRHEDIQSWLKADNAIDGQDIERLIERIENEYAAKTELVGKQA MADFERNVMLQVIDNQWREHLAAMDYLROGIHLRSYAQKNPKQEYKREAFTMFQDLWNGIKFHIASSLTSVQIEQN PVAVVVEEQPIGNIQSIHSESPMEELLGQSQTDLVTEAFNPDTDFSSPEALEARGQIVHNRNDPCPCGSGLKYKQCH GKLA
148	1560	MLNKDQFADNHFIRTIIIEDLESKGHTAVQTRFPPEPGNLYHIGAKSICLNFGLAYIYDGLCNLRFDLTPENKE DEYVNAIKEDVEWLGFHWAGEPRFASNYFDQLYDYAVGLIKDGKAYVDDLTPEEMREYRGTLTEAGKNSPYRDRSV EENLDLFLTRMKNGEFPDGSKTLRLKIDMASGNINMRDPVIYRIRRAHHNTGDKWCYIPMYDYTHCISDAEGITH SLCTLEFEAHRLPLYDCVLNDNIPAPHATRPRQYEFSRLELLYTITSKRKLNOLVVEKHVSGWDDPRMPTISGMRRG YTPEGLRLFAKRAGISKSENIVDMSVLEGAIREEELENSAPRLMAVLNPLKVTITNFETGRTQSRRAAFHPNHEEMG EREVPISQTYYIEADDFAENPPKGFKRLIPGGEVRLRHGYVIKCDEVVKDEAGNVVELKSIDHDTLGKNPEGRKV KGVIHWSAEHAAEIKVRLYDRLFTVERPDAVRGEDGEYLPFTDFLNPESVKEITAYEPAAKDLPAESRWQFERI GYFVTDRKDGHKDTPVFNRTVTLKDSWQPK
149	1572	MLEAYRKAAAERAALGIPALPLNAQQTADLVELLKSPPAGEGEFLVELLAHRVPPGVDDAAKVKASFLAAVAEGSA SSPLISPEYATELLGTMLGGYNIHIALIELDDDKLASIAAKGLKHTLLMFDSFHDVQEAEGKGNKYAQEVQLQSWAD AEWFASRAKVEPEKITVTVFVVDGETNTDDLSRAPDAWSRPDIPLHALAMLKPRDGTIPDKPGEVGPIKLLEELKA KGHPVAYGVGVGTGSSRKSATNSVIWHTGEDIPFVNPKNRFGGVCLGGKIAPIFFNTQEDSGALPIEVDSALKMG DVVDILPYEGKIVKNGETVVAEFLKSQVLLDEVQAGGRINLIIGRGLTAKAREALKLPASTAFRLPQAPAESKAGF TLAQKMVGRCAGLPEGQGVRPGTYCEPRMTTVGSQDTTGPMTDELKDLACLGSFADMVMQSFCHTAAYPKPVDVK THKELPAFISTRGGVSLRPGDGVIHSWLNRLLLPTDVTGGDSHTRFPIGISFPAGSGLVAFAAATGVMPLOMPES VLVRFSGKLQPGVTLRDLVNAIPLYAIKGQLLTVAKAGKKNIFSGRILEIEGLPDLKVEQAFELTDASAERSAAC TVKLNKEPIIYEYMSNVLMKNMIANGYQDPRTLERRIKAMEKWLANPELLEADKADEYAAVIEINMDIKEPIIA CPNDPDDVCFMSERSGTKIDEFIGSCMTNIGHFRAASKLLEGKADTPVRLWIAPPTKMDAKQLSDEGHYGVLGRA GARMEMPGCSLCMGNQAQVREGATVMSSTRNFPNRLGKNTFVYLGSAELAACSKLGKIPPTVEEYQANIGIINEQ GDKIYRNMNEIDSYNEAVETVNV
150	1574	MQVYYDKADLSLIKGTKTVAIIGYGSQGHABAANLKDGVNNVIGLRQGSSWKKAAAGHVVKVVAEATKEADVMM LLLPDETMPAVYHAEVTLKEGATLAFAHGFNVHYNQIVPRALDViMVAPKGPGHTVRSEYKRGGVPSLIAVY QDNNSGAKDIALSYAAANGGTKGVIETTFREETETDLFGEQAVLCCGGVVELIKAGFETLTEAGYAPEMAYFECLH EMKLIVDYLIEFEGGIANMNSISNNAEYGEYVTGPEVNASSKEAMRNALKRIQTGEYAKMFHQEGNVNYASMTARR RLNADHQVEKVGQLRAMMPWITANKLVDQDKN
151	1577	MQLSGAQIIIVQSLKAEGVEYVFGPGAVIEIYDALFQLNKFKHILTRHEQAAVHAADAYARVSGKVGVALVTSGP GVTNALTGIATAYTDSIPMVISQGVGNSLIGTDAFQEVDTVGITRPCVKHNPLVTDINELAETIKKAFQTAASGR PGPVVVDPVKDVTQAMAKFSYPQEDIFIRSTYQPVVQHIGQIKKAVQMLASAKRPVVYFGGGVVLGNASEELTRFV RMTGAPCTGTLMLGAYPSGDRQFLGMLGMHGTYEANLAMQNADVVLAVGARFDDRVSVPSKFFEAKKVIHIDV DPSSIAKRVKVDIPIVGDVKNVLSSEMVALWKQESVPSEDALGKWWKTIEEWRSRDCLFNDGSEIIKPQVVIQKL AEITGNSAITSDVQHQMFQAQYYPFERPROWLNSGGLGTMGVGLPYAIGAKLAAPDQDVFCITGDGSIQMNIQE LSTCFQYRIPVNVTLNNGYLGMRQWEIYYGGRESETYFDSSLPDFVKLAEAYGHIGIRVDKKSDVEGALLEALN QKDRLVFIIDFLTDQKQNVMPVGNGKGLDEMVLPPHMRADGKA
152	1581	MMKLNTOQSPDFQAGLKALLAFETAQN PETERI VADICADVQKRGDAALIEYTNKFDTNAKSIDDLILTOADLNAA FERIPNDVQTALQTAARRVESYHQRQKMEWSYTD EGD TLLGQOITPLDRVGIYVPGGKAAYPSSVIMNAMPAHVA GVKEIIMVVPTPKGERNDIVLAAAYVAGVTKVFVGGQAVALAYGTETIPQVDKITGPGRNAFVAAKRRVFGVV GIDMVAGPSEIILVIADGTTPADWVAMDLFSQAEHDEIAQALIGTSQAYLDEVEAAMDRLIETMPRRDIIIEASLGN RGAMILAKDLDEACEIANYISPEHLELSVENPQEWAKKIRHAGAI FMGRYTGESLGDYCAGPNHVLPSTSRTARESS PLGTYDFQKRSSLIQVSEQGAQKLGETASVLAHGESLTAAHRAAEFRMK
153	1583	MNLTKTQRQLHNFLTLAQEAGSLSKLAKLCGYRTPVALYKLKORLEKQAEQDPMARGIRPSLMAKLEKHTGKPKGWL DRKHRERTVPTAAESTGTAETQIAETASAAGCRSTVNRNTCEQITVSINLDGSGKSRLDTGVPFLEHMIQIA RHGMIDIDISCKGDLHIDDHHTAEDIGITLGQAIQALGDKKGIRRHYHSYVPLDEALSRVVIDLSGRGVLVNYIE FTRALIGRFVDLFEFFFHGVINHSMMLHIDNLSGKNAHHQAEFTVKAFGRALRMAVEHDPRMAGQTPSTKGTLT A
154	1595	MKTSELRQKELKFFETKGHTVVRSSSLVPHDDPTLIFTNAGMNQFKDVFLGFDKRPYSRATTAQKCVRAGGKHNDL ENVGYTARHHTFFEMMGNFSGDYFKRDAIHFAWEFLTSPPEWLNPDKLILATVYAEDEAYNIWLNEIGMPSERI VRIGDNKGAKYASDNFWQMGTGPGCPCSEIFYDHGEEIWGGIPGSPEEDGDRWIEIWCNCVFMQFNREQGNMNPL PKPSVDTGMLERIAAVMQHVHSNEYIDLQDLLKAVARETGAPFRMEEPSLKVIADHIRSCSFLIADGVLPNEG RGYVLRRITRRAVRHGYKLQSKPFHKLADLVKEMGGAYPELKEKQAOQIEEALKNEESRFAQTLETGMALLENA LVKGKGTLGEEIFKLYDTYGFPLYDLTADICRERNIEPDEAGFEREMEAQRARARAQSFKANAQLPYDGQDTEFK GYSERQTESKVLALYKDGEQVNELNEGDSGAVVIDFTPFYAESGGQVGDVGYIFSGENRFEVRLDTQKIAAVFGQF GVQTSGRLKVGDSVTAKVDEIRNANMRNHSATHLMHKALRDVLGRHVEQKGSVLTAESTRFDISHPQAVTAEEIA EVERRVNEAILANVAVNAIMSMEAQTKGAMMLFGEKYGEEVRLQMGGFSTELCGGTHVSRTGDIGLFIISSEG GIAAGVRRIEATGLNALKWAQEQLVKDIAETKAQTEKDVLAQKIAQAGAAHAKALEKELARAKAELAVHAGAKL

		LDDAKDLGAALKVAAQIEADAAAALREIVTDLTGKSDNAVILLA AVNDGKVSLCAGVSKPLTGKVAGDLVKFAAEQ VGGKGGRPDLAQAGGTADKLPAVLDSVKDWVGAKLV
155	1604	MELVFIRHGQSEWNAKNLFTGWRDVKLSEQGLAEAAAAGKKLENGYEFDIAFTSVLTRAIKTCNIVLEESDQLFV PQIKTWRNLNERHYGQLQGLDKKQTAEQYQGDEQVRIWRRSYDTLPLLDKDEFSAHKDRRYAHLPADVPDGENLK VTILERVLFWEDQIAPAILSGKRVLVAAHGNSLRALAKHIEGISDEDIMLEIPTGQPLVYKLDNLKVIEKFYL
156	1621	MGIYDFQMKDAEGNAVDLSGYRGKVLLIVNTATRCGLTPQEALQKLYAQYTAEGLEILDPCNQFREQA PESSGE IAQVCMKFGTKFKIFDKIEVNGANTAPLYAYLKSVPQDKGNHLFKDFVLKLAALGEKRDEGDIKWNTFKFLVNR DGEVVERFAPSVTPEEIEADIRALL
157	1636	LLFSSLLFSSLFSSAAQAASEDSSRSPYYVQADLAYAAERITHDYPKPTGTDKDKitSTVSDYFRNIRAH S YHPRVSVGYDFGGWRIAADYASYRKWNNNKYSVNICKGREQDNREELKTENQENGSHAASSLGLSAIYDFKLND KFDKFKPYIGARVAYGHVKHQVHSVETKTTITVSKPAATSPQGGPIIET
158	1640	MSLYPIYNFSAGPAVLPEAVLETARQEMLDYNGTCFPVMAMSHRSEMFLSILHHAEQDLRQLLKVPDNYKILFLQ GATTQFNMAAMNLAHGFRTADAVVTGNWSRIAYEOMSRSLTDTEIRLAHHGEQFDYDLPPVETWDVAPDSAFVHF AVNETVNGLQYREVPCLSSEGMPPLVCDCMSSEILSREFDVADYGLIYAGAQKNIGPAGTVVIVREDLLERCPNDIP DVFNRYRSHINRDGMYNTPTSYAIYMSGIVFRLQAOQGGVKKIEAVNRLKAQTLTYETIDGSDGFYINRIRPNARSKM NVVFTGDEELDRRFVLEELQGLCLKGYKTVGMRASIYNAMPLEGVRALADFMRFDFQRRYG
159	1642	MSREMLQLAEALASEKNDVAEVVFQALEFALSTAACKKADREHMDRVQINRDTGEYQTFRRLIVADEDYTPDV EKTIEEIQEEIPGTTIQIGEYYEEQLPNEGFGRQAAQTAQIIQLRIRDAEREQNLINEFLAVKEDIVSGTVKRVER HGIIVEVVAGKLDALIPRDQMI PRENFRSGDRIRALFLRVEEIGNTGRKQVILSRTSGDFLVKLYANEVPEIADGM LEIRAVARDPGQRACKVAKNDQRIDPQGTCIGVRGRSVNAVSNELSGERIDVVLWSPEPAQFVMSALSPAEVSR VIDEDKHAVDVIVAEDQALALAIGRGQQNVRLASLTGWLQNLNIMTSAAEDERNAAAEDAIRRLFMDHLNVDEETADV LVQEGFATLEEYVAPAAELLAIEGFDEEIVDMLRNARDAILTMIAAAEKLGEVSDDMRNLEGIDADMRLSLAE AGITTRDDLAELAVDELIEITGVNEETAKAVILTAREHWFTEDK
160	1655	MVHIMFNQAAQELTTIRDILRFAVSRFNEAGLFFGHGTDNAHDEAAYLILHTLNPLDMLAPYLDALKLEAEKEEV LAVIERRAVEHIAPAAYLTHQAWQGEFDYVDERVIIPRSFIYELLGDGLRPWIEYDELVHNALDLCTGSGCLAIQM AHYPDAQIDAVDVSLDALEVAGINVEDYGLEERIRLIHTDLFLEGLETYDLIVSNPPYVDAESVELLPEEYLHEP ELALGSGADGLDATRQILLNAAKFLNPKGVLLVEIGHNRDVLEAAYPELPFTWLETSGGDGFVFLLTREQLGEE
161	1684	MLDIQLLRSNTAAVAERLARRGYDFDTARFDLEERRKSVQVKTEELQASRNSISKQIGALKGQGKHEEAQAMNQ VAQIKTDLQAAADLDAVQKELDAWLLSIPNLPHESVAGKDETENVEVRKVGTREFDFEIKDHVDLGEPLGLDF EGGAKLSGARFTVMRGQIARLHRALAQFMEDTHTLQHGYTEHYTPYIVDDTLQGTQLPKFAEDLFHVTRGDET KTTQYLIPTAETLTNTVADSIIIPSEQLPLKLTAHSPCFRSEAGSYGKDTRGLIRQHQFDKVMQIVHPEKSYET LEEMVGHAENILKALELPYRVTILCTGDMFGAAKYDLEVVVPAQNTYREISSCSNCEDFQARRLKARFKDENKG NRLVHTLNGSGLAGVGRRTLAVAVLENHQNADGSINI PAALQPYMGGVAKLEV
162	1691	MARHVWQAGRFEIGLDKPKIMGIVNLTPDSFSDGGVYSQNAQTLAHAAEQLIKEGADILDIGGESTRSGADYVSPE EEWARVEPVIAEVAGWGVPISLDTRRTVIMEKALALGGIDIINDVAALNDEGAVELLARQADTGICLHMQGLPKT MQINPKYQDVGEVARYLKARSACIAAGIAPQRIILDPGFGSGFGKPLQHNIALMRHLPPELMAETGFPLIGVSR KSTIGELTGEANAAERVHGSVAAALASVARAQIVRVHDVKATADALKVWEALGINL
163	1710	MTDLNTLFANLKQRNPNQEPFHQAVEEVFMSLDPFLAKNPKYTQSSLERIVEPERVVMFRVTWQDDKGQVQVNRG YRVQMSAIGPYKGGLRFHPTDVLGVLKFLAFEQVFKNALTTLPMGGKGGSDFDPKGKSDAEVMRFCQAFMTELY RHIGADTDVPGDIGVGGREIGYLGQYKKIRNEFSSVLTGKLEWGGSLIREPEATGYGCVYFAQAMLQTRNDSFE GKRVLISGSGNVAQYAAEKAIQLGAKVLTVDNSNGFVLFPSGMTEAQLAALIELKEVRREVATYAKEQGLQYFE KQKPWGVAEIALPCATQNELDEEAAKTL LANGCYVVAEGANMPSTLGAVEQFIKAGI LYAPGKASNAGGVATSGLEMSONAIRLSWTREEVDQRLFGIMQSIHESCLKYKGVDTNVYVNGANIAGFVKVADAMLAQGF
164	1716	MAFYAFKAMAAAALAAVALVLSSCGKGGDAAQGGQPAGREAPAPVVGVTVPQPTVALTVELPGRLESIRTA DVAQVGGIIQKRLFQEGSYVRAGQPLYQIDSSTYEAGLESARAQLATQATLAKADALIARYKPLVAAEAVSRQEYDA AVTAKRSAEAGVKAQAAQAIKSAGISLNRSRITAPISGFIGQSKVSEGTLNAGDATVLTIRQTNPMYVNTQ SAS EVMKLRRQIAEGKLLAADCIVIAVGKIFDDGTVYPEKGRLFADPAVNESTGQITLRAAVPNDQNILMPGLYVRVLM DQVAVDNAFVVPPQAVTRGAKDTVMIVNAQGGMEPREVTVAQQQGTNWIVTSGLKDGKVVEGSIAGITGAKKV TPKEWASSENQAAAPQSGVQTASEAKPASEAK
165	1796	MIMAKKISILVGSLLRASFARKVALNAAEMFPEGWQAEIIVEIGHPLYNFDYDDPAVEDVPLPESYTAFRETIKAS DGILFVTSENNRTIPIACLKNADIGSKPNADVAWNKPKAGIISHSGVGMGGYSSQKNLRLALSYFDMPVTGQPEVF LGNSPTLFDENGKLIDSARDFVQSYINQFVGLIERNAK
166	1809	MNNLIKINLLPYREEMNKRQQQFKTLMYGA VLTGVAAVAATYLFI DNMNINQSERNTLLETSIAHLDTELSEI QKLQEKAFLIKKNKIEELQLKRLQAAKILDSLNEAVPGSTYLTSLDAVTADSYRLSGRTSSDNRVAAMMRAMPNTG IFKQPELLSIKKNNSHQEFTLQATLQPIVKAESKENPASGNAQEAN
167	1810	MASKSSKTNLDLNNILHLLNLPARLFIA LLAVA AVLGLGYAGLFKSQMESLEEEAKETELKNTYKQKSIDAASLNN LRDELASIRSAFDIMLKQLPTDAEIPNVLQELHQAGSSNGLRDSVMPQPPVDDGPIKRLPYSISITGNYEQISQF

		TRDVGSLSRIITLESLKIAQSPENGGNPDKSSILNLSSAIATTYQAKSVEELAAEAAQNAEOK
168	1811	MKHYALLISFLALSACSQGSEDLNEWMAQTRREAKAEIIPFQAPLTPVAPVSYPPQLTGPNAFDFRRMETDKKGENAPDTKRIKETLEKFSLENMRYVGILKGQKVSGIEAEGYVTVGVGNLYGQNYGRIESITDDSIVLNELIEDSTGNWVSRAKAELLNNSDKNTEQAAAPAAEQN
169	1812	MNTKLTKIISGLFVATAAFQTASAGNITDIKVSSLNPKQK1VKVSDKE1VNPTGFVTSSPARIALDFEQTGISMDOQVLEYADPLSKISAAQNSRARLVLNLNKPQYQNTVEVRGNKVVIFINESDDTVSAPARPAVKAAPAAPAKQQAAPSTKSASVSEPFPAKQQAAAPFTESVSVSAPFSPAKQQAAASAKQQAAAPAKQQAAAPAKQQAAAPAKQTNIDFRKDGNAGIIELAALGFAGQPDISQQHDH1IVTLKNHTLPTTLQRSLDVADEFKTPVQVTLKRLNNNDTQLIITTAGNWELVNKSAAPGYFTFQVLPKQNLIESGGVNNAKFTGRKISLDFAQDVEIRTLQILAKESGMNIVASDSVNGKMTLSLKDPWDQALDLMQARNLDMRQQGNIVNIAPRDELLAKDALLQAEDIADLGALYSQNFOQLKYKNVEFRSILRLDNADTTGMRNLTISGRGSVLIDPATNTLIVTDTRSVIEKFRKLIDELDVPAQQVMIEARIVEADGFSRD LGVKGATGKKLKNDTSAGWGKVNSFGGDKWGAETKINLPITAAANSISLVRRAISSGALNLELSASESLSKTKTLANPRVLTQNRKEAKIESGYEIPFTVTSIANGSSTNTELKKAVLGLTVTPNITPDQIIMTVKINKDSPAQCASGNQTIICISTKLNNTQAMVENGGTLIVGGIYEEDNGNTLKVPLLDIPVIGNLFKTRGKKTDRRELLIFITPRIMGTAGNSLRY
170	1835	MSVIQDLQSRLIAQTTDIEALDALLNEQKIALYCGFDPTADSLHIGHLLPVIALRRFQOAGHTPIALVGGATGMI GDPSFKAAERSLNSAETVAGWVESIRNQLTPFLSFEGGNAIMANNADWFGSMNCLDFLRDIGKHFSVNAMLNKESVKQRIIDRGAGISFTEFAYSSLQGYDFAELNKRHGAVLEIGGSDQWGNITAGIDLTRRLHQKVFGTLPLVTKSDGTKFGKTEGGAVWLNAKKTSPYQFWLKVADADVYKFLKYFTFLSIEEIDAIEAKDKASGSKPEAQRLAEMTRLIHGEELAAAQRISESLFAEDQSSITESDFEQLALDGLPFEVSDGINVVEALVKTGLASSNKEARGFVNSKAVLLNGKPAEANNPNHAAERPDDACLLNGEHKRGKYTILRRGKRNHALLVWK
171	1838	MSLKCGIVGLPNVGKSTLFNALTQSGIEAANYPFCTIEPNVGIVEVPDPRMAELAKIVNPQKMOPAIVEFVDIAGLVAGASKGEGLGNQFLANIETDAIVNVVRCFDDDNIVHVAGRVDPIADIETIGTELADLASVEKAIVREEKRARSGDKDAQKLVLCKLPHLDEGKPVRSFGLDAEERAMLKPLFLTAKPAMYGVNAEDGFENNPHLDRLKELAAKENAPVVAVCAAMESEIAELEDDEKAELFLAEMGLEEPGLNRLIRAGYDLLLGLQTYFTAGVKEVRAWTIHKGDATPOAAGVIHTDFERGFTRAQVISYDDFVSLGGEAKAKEAGKMRVEGKEYVVDQGDVMHFLFNV
172	1843	MPTQSKHASINIGLQAREALMTQFRPILNQANITDQQWRIIRLLAENGTLDFQDLANQACILRPSLTGILTRLEKAGLVVRLKPSNDQRRVFLKLTAEGEKLYYEIGEEVDERYDAIEEVLGREKMLLKDLLAELAKIEDALNS
173	1849	MSTPALLVLADGSVFHGTISIGEGSTSGEVVFTSMTGYQEILTDPSCQKIVTLYPHIGNTGNAEDEESRSVYAAGLIIRDPLPLLHSNFRASESLHDYLVRNKTVAIADIDTRRLTLLREKGAQGGAILTGADATIEKAQELIAAFGSMGVKDLAKEVSCETYEWEVTEGEWALGKFVTPDEQPYHVVAYDFGVTKNIRLMLASRCRITVVPAPQSAEDVLALNPDGVFLSNGPGDPEPCTYAIKAVQKIESGKPIFGICLGHQLIISLAIGAKTLKMRFSHHGANHPVQDLSGKVITTSQNHGFAVDADTL PANARITHKSLFDNTLQGIELTDKPVFCFQGHPEASPGPQDVGYLFDKFIGNMKAAKRA
174	1854	MSIPINFNNLKYLLNDMRNKNRIIEAFFPNYNQRQYAVILTRYKDEPRPDDYQAKLEFFNLSSENSIFAYADFYEVHFKSATDFINFFKINVQAGAAKIREIQFSFSNLfadFIPTQKDLI1YKKIVATRLEPNSPNTIYCVDVRRNGKDKAGKPNRRSSENSEKAKILRPELYEKFKADSNSYSSFSDNPSDEKTDAAEIIRVENTNRQ
175	1855	MPKRTDLKSILIIGAGPIVIGQACEFDYSGAQACKALREEGYKVLVNSNPATIMDPEMADVTYIEPIMWQTVEKIIAKERPDAILYPTMGGOTALNCALDLARNGVLAKYNVELIGATEDAIDKAEDRGRFKEAMEKIGLSCPFSVCHTMNEALAAQEQQVFPYLIRPSFTMGGGGIAYNKEFLAICERGFDSPTHELLIEQSVLGWKEYEMEVVRDKNDNCIIICSIENFDPMGVHTGDSITVAPAQTLTDKEYQIMRNASLAVLREIGVDTGGSNVQFAVN PANGEMIVIEMNPRVSRSSALASKATGFPIAKVAAKLAVGFTLDELRNIDTGGKTPASFEPSIDYVVTKIPRFafeKFPADDRLTTQMKSVGEVMAMGRTIQUESFQKALRGLETGLCGFNPRSEDKAEIRRELANPGPERMLFVADAFRAGFTLEEIHCAIDPWFLAQIIEDELMKEEKAVSDGILSDLDFAALRRLKRKGFSKRLAQLNVSEKEVREHRYALKLHPVYKRVDTCAAFA TETAYLYSTYEECESRPSDRKKVMI LGGGPNRIGQGIEFDYCCVHAALALRESGFETIMVNCNPETVSTDFTDS RLYFEPPLTLEDVLEIVRTENPWGVIVHYYGQTPLKLANALVENGVNIIGTSADSIDAEEDRERFQKVLNDLGLRQP PNRIAHNEEALVKAEEIGYPLVVRPSYVLGGRAMQVHSAEELQYMREAVQVSEDSPVLLDFFLNNAIEVDVDC VSDGKDVVIGGIMQHVEQAGIHSGDCSLLPPYSLSEEIODEIIRRQTKAMAYALGVVGLMNQFAVQDGUVFLEV NPRASRTVFPVSKATGVPLAKVGARCMAISLKEQGVEKEVVPDFYAVKEAVFPFIKFGVDTILGPEMRSTGEVM GVGASFGEAYYKAQLGAGERLNPTGK1FLSVREEDKERVIKTAKNFQVLYGIGICATRGTQYLTEHGLIVQTINKVPEGRPHIGDALKNGEIALVVNTVSSDPQSVDSDHIIRQSALQQRVPQYTTAGGEAMSEGAKSRDHLGVYSVQELH GRLKNRN
176	1859	MDISDFDFTLPEKLIKAOHPPEVRGSSRLLVALPDMPQLQDRVFGDLPDYVEAGDVLVFNNTKVMKARLFGQKDSSGRIEALIERVLDNHTALAHIRSSKSPKPGMGLVFEGLIRAVTGVREGELFCLRFEGETVYELLEQNGHLPPLPPYIERAADADDDSRYQTVYAKYQGAVAAPTAGLHFTEEELLHRLKDGAUTAEVTLHVGAGTFQPVVDKIEEHKMHSEWFE VPSETAAAVEAAKARGNKKWAVGTTSMRALESAAARATGRLKAGQGDTDIFITPGYRFNVVDRLVTNFHLPKSTLLMLVSAFSGMGHIRAAYRHAVEREYRFFSYGDMALVGRNEGVR
177	1861	MLKKVLIANRGEIALRVLRACREMGIATVAVHSEADKDSLHVLADESVCIGPAASAQSILNVPAAIAAEVSCADAHPGIGFLAENADFAEQVEQSGFTFIGPKPDTIRLMGDVKSAKHAMIAAGVPCVPGSDGALPDDGEELKIADKV

		GYPVIIKASGGGGGRGMRVVEKKEDLLQSVEMTKAEGAAFGNPMVYMERLYQPRHVEIQVIADEHGNATIYLAERDCSLQRHQVIEEAPAPITEKERAKIGNACADACKRIGYRGAGTFEFLEDFEGEFFFIEMNTRVQEHPTELITGVDIVQEQLRIAAGLPLQYKQKDIQVEGHAFECRINAEDPYNFI PSPGLIESCHLPGGFGIRVDSHIYQGYRIPPYDSDLIGKICVHGKTREQAMAKMRVALAELAVTGKTNPLHRLFADAGFQKGGVSIHYLEHWLEDRKAKQDK
178	1862	MPYQQITVNNDAVAERLADALMEHGAISAAIEDAYAGTQNEQAI FGEPEGMPEAQIWQOSKVIALFGEHEDEAAII QTATQECGLKDLAYTGETIEDQDWVRLTQSQFDPIRISDRLWITPSWHEPEGSAVNRLDPGLAFGTGSHPTTRL CLKWLDTQLKNNGESVLDYCGCNSGILTIAALKLGAGFAVGVDIDEAQVRAGKDAAQNNVDAQFFLPDGLPQGQFDVVANILANPLRMLGEMLAARTKQGGRIVLSGLLDEQAEELGGIYSQWFDLDPAEETEGWARLSGVKR
179	1864	MNRNEILFDRAKAIIPGGVNNSPRAFGS VGGVPRFTIKKAEGAYVWDENGTRYTDYVGWSGP AIVGHAHPEVETVC EAALGGLSFGAPTEGEIVIAEEIAKIMPSVERLRVSSGTEATMTAIRLARGFTGRDKIIKFEFCYHGHSDSSLVVK AGSGLLTFGNPSSAGVPADFTKHTLVLEYNNIAQLEEAFAGSGNEIACVIVEPFVGNMNLVRPTEAFVKALRGLTE KYGAVLIYDEVMTGFRVALGGAQSLHGT PDLTTMGKVIGGGMPLA FGGRKDIMECISPLGGVYQAGTLSGNPIA VAAGLKTLEI IQREGFYENLTARTEQLVQCFRTAADAAIGIEFTADSVGGMFGLYFAAHAPRNYADMARSNIEGFKQ FFHGMLDRNVAFGPSAYEAGFVSAHTPELIDETVAVAVEVFKAMAE
180	1903	MTLAEFWPLCLRRLHDMLPQGQFAQWIAPLTVGEEGGVVVYGNQFACNMLKSQFAGKIEAVREELAAGRSAFVF KPGEGVRYEMA AVEGAVEPAEPISLHAVSEGM PVQEVL DELPSEEVKPAASKTAADILAERMKNL PHEPROAAGS ASRPESVAVAKARTDVQRDAE EARYEQTNLSPDYTFDTLVEKGKNRLAAAAAQAIAESP GQSYNPFFLYGSTGLK THLVQAVGNELLKNRPDAKVR YMHSDDYIRS FMKAVRNNTYDVFQOQYKQYD LIIIDDIQFIKGDRTMEEFFYLY NHFHNEKKQLI LCTDVLPAKIEGMDDR LKSRSFWGLTLEPPELEMRIAILQKKA AAGISIEDEAALFIANLIR SNVRELEGAFNRVGASSRFMNRPVIDIDLARTALQDIIIAEKHKVITADI IDAVAKYYRIKISDVLGKKRTRNIAR PRQVAMSLTKELTTL SLP SIGDSFGGRDH TTMHGIRAVAKLREEDPELAQDYEKLLLION
181	1920	MTQDKILJLDFGSQVTQLIARRVREAHVYCELHSFDMPLDEIKA FNPKGIILSGGPNSVYESDYQADTGIFDLGIP VLGICYGMQFM AHHLGGEVQPGNQREFGYAQVKTIDSELTRGIDQGEPTL D VWM SHGD KVSKLPDGFAVIGNTPS CPIAMMENA EKQFYGIQFHPEVTHTKQGRALLNRFVLDI CGAQPGW TMPN YIEEAVAKIREQVGSDEV ILLG SGGV DSSVAA ALI HRAIGDQ LTCVFDHGLRLNESKMVMDMFARNLGVKVHVDAEGQFMKLAGVTDPEKKR KIIGAE FIEVFDAE EKKLTNAKWL A QGTIYPDVIESAGAKT KKAHAIKSHHN VGGL PENMKLKLLEPLRDLF KDEV RELGVA LGLPREM VYRHPFPGPGLGV RILGEVKKEYADLLRQADDITI QELRNTT DENG TS WYDLTSQAF AVFLPVKSVGVM GDGR TYD YVIAL RAVITSDFMTAHLWELPYSLLGKVSNRIIN EVKG IN RVVYD VSGKPATI EW
182	1921	MSTQDLNGKIALVTGASRGIGAAIADTLAAAGAKVIGTATSESGAAAISERLAQWGGEGRVLNSAEPETIESLIAD IEKAFGKLDILVNNAGITRDNLLMMRKEEWDDIMQVNLSKVSFRASKAVLRGMMKQRSGRIINITSVVGVMGNAGQ TNYAAAKAGLIGFSKSMAREVGSRGITVNCVAPGFIDTDMTRALPEETRQFTAQTLGRFGDAQDIADAVLFLAS DQAKYITGQT LHVN GMLP
183	1930	MMTQTLIELLTEELPPKALNNLGNHFAASVAEGLEKAQLVDGAAEFTAYASPRRLAVQVKNVKAQADQKIVKG PAVANAMKDGAPTKALEGFARGAGAKIEDLTIVHDGKQDVYAYEVQIGKPLGGLLEDITINQAVKKLPIPKVMRWG SSTFTFV RPVHGLVVLHG GDIVNVSVLQSGNKT LGHRFLS DGEITIENADS YAOQMREQKVVASFAERKAALQ TVLEGQARRLNATAA DE ALL D E V T A L V E W P V U L E A G F E E H F L A V P Q E C L I L T M Q Q N Q K Y F P L L D Q N G K I L M N R F L L VS NLQTEDPSHIIQGN ERVLRARLSDAEFFYKQDQKATLESRLPKLTNVVYHNKIGSQAERIERLQSI A HIAKAL GADAAA AERAARLAKADLVTEMVGEFPELQGTMGKYYARLDGETE E IT E A V E Q H Y Q P R F A G D N L P E G K I A A A V A L A DKLET LVG I W G I L I P T G D K D P Y A L R A A L G I L R M L M Q Y G L D V N E L I Q T A F N S F P Q G L L N E K T P S E T A D F M Q A R L A VLLQNDYPQDIVAVI LA K Q P R R L D D L T A K L Q A V A A F K Q L P E A A A A A A N K R V Q N L L K K A D A E L G A V N E S I L L Q D E E KALFAAAQGLQPKIAAAA AEGNFQTA L SELASVKPQVDAFFDGVMVMAEDA AAVKQNRNLNRLAEQMNAVADIAL LGE
184	1934	MSQGKIVQIIGAVDV E F P R D M I P R V Y D A L K D E N G L T L E V Q Q L L G D G V V R A I A M G S S D G L K R G M T V S N T G A P I T V P V G K G T L G R I V D V L G T P V D E A G P I D T D K S R A I H Q A A P K F D E L S T T E L L E T G I K V I D L L C P F A K G G K V G L F G G A G V G K T V N M M E L I N N I A K A H S G L S V F A G V G E R T R E G N D F Y H E M K D S N V L D K V A M V Y Q G Q M N E P P G N R L R V A L T G L T M A E Y F R D E K D E N G K G R D V L F F V D N I Y R Y T L A G T E V S A L L G R M P S A V G Y Q P T L A E E M G R L Q E R I T S T Q T G S I T S I Q A V Y V P ADDLTDPSPATTFAHLDATV VLSRDIASLGIYPAVDPLDSTSRSQLDPMVLGQEHYDVARGVQSTLQKYKELRDI IA ILGMD ELS D E D K L T V M R A R K I Q R F L S Q P F H V A E V F T G S P G K Y V A L R D T I A G F K A I L N G E Y D H L P E Q A F Y M V G S I E E A V E K A K T L N
185	1936	MQLNP AEISDLIKAKIENLSVNAEVRTCGTVISVTDGIVHGLSDAMQGEMLEFPGNTFGLAMNLERDSVGAVVL GEYEHIKEGDTVCTGRILEVPGRELVGRVVDALGRPIDGKGPINTTLAPIEKIA PGVIA K S V D Q P M Q T G L K A IDSMVPVGRGORELII GDRQ TGKTAVALDAIVNQKGTGVICIYVAIGOKASSIANVVRKLEEHGAMEHTIVVAAATA SEAAALQYIAPYSGCTMGEFFRDRGEDALIVYDDL SKQAVAYRQISLLLRRPPGREAYPGDV FYLHSRLERAARV NEHEVEKLTNGEVKGKTGS LTALPIIETQAGDVSAFVPTNVISITDGQIFLETDLFNGIRPA INAGISVS RVGGA AQT KVI K L G G G I R L A L A Q Y R E L A A F S Q F A S D L D E A T R K Q L E H G E V V T E L M K Q K F S T L N T A E M A L T L W A I N N G S Y SDVPVAKALAF ESE FLSFVRTQHPEVLEAVNASGAMSDESEKTLEAAMKSFKSSYAYQA
186	1937	MAEFATIARPYAKALFGLAQEKNQIESWLGGLEKLA AVVQEGKVASLIDR PETNASEKA DILIDLVGLKDKELKNF VIVLAGQKRLSILPEVYAQYQDLT LSFNHIKSAVIY SAYPLTDKQV GELVQMLNKRFDSELKISVEIEPELIGGIK

		VEVGDQVLDSLQGKLSALYTTMTN
187	1938	MNINATLFAQIIIVFFGLWFTMFKVWPPIAKALDERAAKVAEGLAAAERGKDFEQAEKKVAELLAEGRNQVSEMV ANAEKRAAKIVEEAKEQASSEAARIAAQAKADVEQELFRARESILREQAVLAVKGAEISLRSEVDASKHAKLLDTL KQEL
188	1953	MMTLYSGITCPFSHRCRFVLYEKGMDFEIKDVIDYNKPEDLAVMNPNQVPVLVERDLVHESNIINEYIDERFPH PQLMPGDPVMRGRGRRLVLYRMKEKFNFNVQVLENPAATNKEQAKAREAIGNGLTMAPSFSKSKYIILGEDFSMDIV ALAPLLWRLDHDVKLGKSAPLLKYAERIFQREAFIEALTPAEKAMRK
189	1966	MSPSPFIEMKDVAFAYGDRPILKNINFSPQGNFAAVMGSGSGKTTMLRLITGQIRPQSGQVLIEGRDLAGFSAD ELYEHRRRMGVLFQHGALFTDLSVFDNIAFPRELTRLPEAVIRDLVLLKLNAGLGVENLMPSELGGMSRRVA LARTIALDPEIMLYDEPFGLDPISLGVIAHLISRVNKALRSTSIVTHDIEKSLEIVDQVIFLAHGEIMFGSPQ EMRELDSPPWVRQFVGGLADGPVAYRYPQTSQQDLLG
190	1968	MKQLAMYINGRFENDFNGEWRDVLPNSTEEIAREPKGKADVDRAVAAAQAQPAWERLPAVERGAYLRKIAQGI RERADELTDIVAEggKTKDLARVEVMFTADYLQAEWARRYGEETIQSDRPRENILLFKRPLGVIAGILPWNFP FFLIARKMGPALVTGNTIVVKPSSVTPINCHIAEIVDAVGLPAGVFNVVNGPGAEIGNALSAAHPQVDMVSLTGSV EAGRQVMEAAASANITKVSLELGKAPAIKLKDADLLAVKSILASRVNGTQICNCAERVYHSSLKDAFIEKMTA AMKGVRYGNPAEAEAGALEMGPLIEERAVKAVAEKVERAVKQGAKLVCGGKRAEGRGYFFEPTLLTDTDNSMDIMK EETFGPVLPVSAFDTLDQVIALANDCEFGLTSSVTTNLNEAFYVTRRLQFGETYINRENFEAMQGFHAGWKSGI GGADGKHGLEEYLQTQVYYLETDI
191	1982	MSNRPTLLLVDGSSYLYRAYHAMQNLTAPDGAPTGALYGVINMLRRLSEYPHDYCAVVDAGKNFRHQMFEEY KATRPPMPDDLQPAEALPDVLVRTGPVLVIGQVEADDVIGTLAKQGAHGLRIVSTGDKDMAQLVDERVTLVN TMSSETLDIEGVKAKFGVRPDQIRDYIALMGDKDNVPGEKCGPKTAVKWLEAGSLAGVMHEASEIKGVGENL QAALPOLPLSYDLVTIKTDVDLHAELSDGIESLRRTPKWAQLVDFKRWGRTWLKEAESNMNTGSTDDLFGSDS IGEQAALNAEMPFEKQAEKATAPEKLDYQAVTTEAQFAALLDKLSRADTIGIDTETTSLDAMNASLVGISIAFQAG EAVYIPVGHSITAPEQOLDLQDVLGRLKPHLNPALKKIGQNLKYDQHFANYGIALNGIAGDAMLASYYIESHLG HGLDELSERWLGLETTITYESLCGKGAKQIGFADVAIGQATEYAAQDADFLRLEAHLRAQMDEKOLEMELYKMEPLV AQVLFEMERNGVQIDRAELARQSAELGAELMKLEQEAYAAAGQPFLNSPKQLOEILFDKMGIPTKGLKKTAKGGI STNEAVLEQ LAPDYLPLKIIQLQRSLAKLKSTYTDKPEMISPDKGRVHTTYAQAVAITGRLASNNPNLQNIPIRT EEGRKVRAFTAPOGSVIVSADYSQIELRIMAHLSGDKTLIAAFQNGEDVHRTAAEVFGTAPENVSSQRRYAKS INFG利YGMQYGLAKSLGIDNLSAKNFIDRYFARYPGVAEYMQRTEQAAAQGYVETLFGRRLYLPDIRNKNANA RAGAERAAINAPMQGTASDLIKRAMIDVSRWLSECEASPWDELLQSKLIMQVHDELVLEVETELEDFVKEKLPQIM AKVDDGGLLDVPLVAEVGVGENWEAH
192	1996	MSVVLPLRGVTALSDFRVEKLLQKAALGLPEVKLSSFWYFVGSEKALDAATVKEKLQALLAQSVEQTPKAREGL HLFLVTPLRGTTISPWASKATNIAENCLLAGIERIERGMWVLEGRLNDEQKQWAALLHDRMTESVLPDFQTASKL FHHLESETFSGVDVLGGGKEALVKANTEGLSADEIDYLVENYQALQRNPSDVELMMFAQANSEHCRHKIFNAD FILNGEKQPKSLFGMIRDTHNAHPEGTVVAYKDNSVIEGAKIERFYPNAAENQGYRHFEEHTIIIMKVETHNHT AIAPFAGAATGAGGEIRDEGATGKGSRPKAGLTGFTVSNLNPDLKQWPWEQDYGKPEHISSPLDIMIEGPIGGAAF NNEFGRPNLGLYFRTFEEKFDGQVRGYHKPIMIAGGLSIQAOQTHKDEIPEGALLIQLGGPGMLIGLGGAAASSM DTGTNDASLDFNSVQRGNPEIERRAQEVIDRCWQLGGKNPIISIHDVGAGGLSNAFPELVNDARRGAVFKLREVPL EEHGLNPLQIWCNCESQERYVLSILEKLDCAFRAICERERCFCFAVVTATDDGHLKVRDDLFANNPVDLPLNVLLGK LPKTTRTDKTVAPSKKPFHAGDIDITEAAYVRLPAVAKNFLTIGDRS VGGI LTHR DQMV GK YQTPV ADCAVTM MGFTNYRGEAMSMGEKPTVALFDAPASGRMCVGAEITNIAAVNIDIGNIKLSANWMAACGNEGEDEKLYRTVEAV SKACQALDLISIPVGKDSLMSMKTWQDGEKKSVSPSLIISAFAPVKDVRKTVTPELKNVEDS VLLFVDLFGFKA RMGGSAGFQVYNNMSGDAPDLDGRLKAFYSVIQLVAENKLAYHRSDDGGLFAVLFEMAAGR GCLIDIDLNL LAQTFITNHALTSQLSLRTREEVKALAEWQETIARTLFNEELGAVIQRKQDVADIINLFYQQQLHHNVFEIGTLTDE NTLII RDGQTHLISDNLIKLQQTWQETSHQIQLRDNPACADSFALIGDNERALS FADV KFDVNEDIAAPFINSG AKPKIAILREQGVNGQIEMAAAFTRAGFDAYDVHMSDLMAGRIHLADFKMLAACGGFSYGDVLGAGEGWAKSILFH PALRDQFAAFFADPDTLTGVCNGCQVSNLAEIIPGTAGWPKFKNLSEQFEARLSMVHVPKSASLILNEMQSS LPVVVSHGEGRADFALHGGNISADLGLQYIDGQNQVTQTYPLPNPGSPQGIAGVTNADGRITIMMPHPERVYRA AQMSWKPEGWTLSGWYRLFAGARKALG
193	2000	MNQTAIRADVRTRFI FDDMPVRGLHVRLENVWQHIVKQKNYPAAIRRALGELLAAGVLLSGNLKNEGTLIVQVQG RGRLKMLVAEAASDRTVRATARWDETAEIADDES LGDLLGEGGVFVLTQPKDGEPEWQGVVPLEGGGIAQMLVNYM KRSEQLDTHIVL SASDEAAGGLLVLQRLPEEVLDDEAWEHVSTLARTLTAEELAGLDAQHVLYRLFHETPPRVFEP TFFEFSCTCRGKVSMDLMLGGEEVGGVVVEQGSIEVDCDFCHSKYVFDETVDNALFGEDVVGVAKGLPRHTVQ
194	2039	MKKSLIALTLAALPVAAMADVTLYGTIKAGVETRSVHFQNGQVTEVTTATGIVDLSKIGFKGQEDLGNGLKAIW QVEQKASIAGTDGSGWGNRQSFIGLKGGFGKLRVGRNLNSVLKDTGDNIPWD SKSDYLGVNKIAEPEARLISVRYDSP EFAGLSGSVQYALNDNAGRHNSES YHAGFNYKNGGFFVQYGGAYKRHHQVQEGLNIIEKYQIHLVSGYDNDALYAS VAVQQQDAKLT DASNSHNSQTEVAATIAYRFGNVT PRVSYAHGFKGLVDDADIGNEYDQVVAEYDFSKRTSALV SAGWLQEGKGENKFVATAGGVGLRHKE
195	2057	MKTFSAKPHEVKREWVFI DAQDKVLGRVAAEVASRLRGKHKPEYTPHVDTGDIIVINADKLRVTGAKFEDKKYFR

		HSGFPGGIYERTFREMSEQFPGRALEQAVKGMLPKGPLGYAMIKKLKVYAGAEAHAAQQPKVLELK
196	2079	MKVGFGWGRGMVGSVLMQRMKKEENDFAHIPEAFFFTTSNVGGAAPDFGQAAKTLDDANNVAELAKMDIIVTCQGGDYTKSVFQALRDGWNNGYWIADAASSLRMKDDAIIVLDPVNRDVLNDGLKNGVKNYIGGNCTVSLMLMALGGLFQNLDVEWATSMTYQAASGAGAKNMRELISGMGAVHAQVADALADPAGSILIDRKVSDFLRSEDYPKANFGVPLAGSLIPWIDVDLGNQGSKEEWKGGVETNKILGRSDNPTVIDGLCVRGAMRCHSQAITLKLKKDLPVSEJETILAGANDWKVIPNEKEASIHETPAKVTGTLSPVGRIRKLGGMGEYISAFTVGDQLLWGAEEPLRRVLRIVLGS
197	2086	MKFIDEAKIEVAAGKGNGGATSFRREKFVPRGGPDGGDGKGGGSVVAEADENTNTLVEYRFVKRYQAKNGEKGHGSDRYGAGADDIVLKMPVGTLLIRDLDGETVADLTLYHGQRVCLAKGGKGGLGNHFKSSVNRAPKOSTPGEEGEARSLOLELKVLADVGLLGMPNAGKSTLITAVSAARPKIANYPFTTLHPNLGVVRIDENHSFVMADI PGLEGAEGAGLGHRLFKHLRSRTGLLLHVVDLAPFDETVPAAEALAIINELRKYDEELYGKPRWLVLNKLDMLDEEEAQTRAAFLAEVGWDYPKPDDRQFDMETPRLFQISALTHQGTQELVHQINQYLTEKKRIEAEEKAANVIEQQPKTDGFKPE
198	2101	MSQITMRQMIIEAGVHFQHQTFRWNPKMAQYIFGARNKIHIVNLEKTLPMFQDAQEAVRRLVANKGTVLFVGTKRQARDIIREEATRAGMFPVDRWLGGMLTNYKTVKQSISKRLEEKTALENAAESGFSKKEILEMQRDVEKLERSLGGIKNMKGLPDAIFVIDTGYQKGLVVAEKLGIPIAVVDTNNSPDGVKYVIPGNDDSAKAIRLYCRIADAVLEGKNQALQETVAAAQEEAAAE
199	2102	MAEITAKMVADLRAATGLGMMECKKALVEAEGNFKAEEILRIKSGAKAGKLAGRTAAEGVLAYAINGNVGALVEVNCTDFVAKDAGFVEFANFVAKTAAEKKPASVEELSELVEAERKAIIAKLGEMNSVRRFQVIDTANQLVAYIHGALATEGVLVYEKGSEDVARKIGMHIVAACPQCVSEAEVDAETVEKERHIYTEQIASGKPADIAAKMVEGRIRKFLAEITLNGQAFVMPDQTVQFSKENGTEVISFVRYKVGDGIEKKAVDYYAEVAAAKV
200	2103	MTQQIKYKRVLLKLSGESLMGSDPFGINHDTIVQTGEIAEVVKMGVQVGIVVGGGNIFRGVSAQAGSMRATADYMGMMATVMNALALKDAFETLGIKARVQSAALSMQQIATYARPKAIQYLEEGKVIIFAAGTGNPFTTDAAALRGAEMNCDVMLKATNVDGVTADPKKDPSATRYETITFDEALLKNLKVMDATAFALCRERKLNIVVFGIAKEGSLKRVITGEDEGTLVHC
201	2129	MSQNHTILQSLPVGQKVGIAFGSGGLDTSAALLWMKLKGALPYAYTANLGQPDDEDDYNAIPKKAMEYGAENARLIDCRAQLAHEGIAAIQCGAFHVSTGGIAYFNTTPLGRAVTGTMVLVSAMKEDDVNWIWGDGSTYKNDIERFYRYGLLTPALKIYKPWLDDQFQFIDELGGRHEMSEFLIANGENYKMSVEKAYSTDNSMLGATHEAKDLEFINSGIKIVKPIMGVAFWDENVEVSPEEVSVRFEFGVVALNGKEYADPVELFLEANRIGGRHGLGMSDQIENRIIEAKSRGIYEAPGMALFHIAAYERLVTGIGHNEDTIEQYRINGLRLGRLLYQGRWFDSQALMLRETAQRWVAKAVTGEVTLELRRGNDYSILNTESPNLTYQPERLSMEKVEDAFTPLDRIGQLTMRNLDITDTRVKLGIIYSQSGLLSLGEGSVLPQLGNKQ
202	2138	MEAEVINQNNNTINDLERSEDIRVYMDYQGKKDRLEEVIGLSEDPFLWNPDPKRAQEIGKERKILEGIVLTLDNIA SGIEDNRMLIEMTVEENDEEGFAAVQEDVAGLEKQOMADLEFKRMFNQPADPNCFIDITAGAGGTEAEDWAGMLFRMYSRYAERKGFRIEILEEDDGEIAGINRATIRVEGESEYAYGLLRTETGVHRLVRYSPFDSNNKRHTSFASVFVYPEIDDSIEIEINPADLIRDITYRASGAGGQHINKTDSAVRITHEPTGIVVQCQNDRSQHANKAAAMEMLKSLEYEMRKRNEEKQALEEGKSDVGWSQIIRSYLDSSRIKDLRTGYEVGNTKAVLDGDLDFIEASLKQGV
203	2154	MSVLIIVEHDNKQLNPTTLHAVTAAAKLGKVDLLVAGNGASAVVEFAKQVAGVKVLVADAHYAEGLAEELAPLVKLAADYRYVAATATTFGKNLLPRVAALLDVPQISDLTEIVDNTTFVRPIYAGNAFETVQADSEKLVLTFRATVFD AVAAQGGNAEVINVEATPAQNLSRFVNRLSHSDRPELTQAKVIVSGGRALGSAEKFNEVLTPLADVLGAIAIGASRAAVDAEYAPNDAQVGQTGKVVAPQLYFAIGISGAIQHAGMQDSKVIVAINKDADAPIFNVADYGLVGDLFEIVPQLTEVLKN
204	2155	MKALVAVKRVVDYNVKVRVKADGSDVDIGNVKMSMNPDEIAVEEAVRLKEAGKVSEIVAVSLGEKKCEETLRTALAMGADRAIHVTDTKLESLAVAKLLKAVADKENPQIFFLGQAIIDDDANQVQAMLAALLNAAQGTFASKVQIEGDEQVIVREIDGEETIALKLPAVISADLRLNEPRFVLPNIMAACKKPLEKLTDDLADISPLKTVKFAEPKARQAGVKVASVAELVEKLKNEAKVI
205	2159	MSIKVAINGFGRIGRLALRQIEKAHDIEVVAVNDLTPAEMLLHFLKYDSTOGRFQGTAELKDDAIIVNGKEIKVFA NPNPEELPWGELGVDVILECTGFFTNKTKAEAHIRAGARKVVIISAPGGNDVKVVGVNQDILDGSETVISAASCTTNCLAPMAAVLQKEFGVVEGLMTTIHAYTGDQNTLDAPHRKGDLLRARAALNIVPNSTGAAKAIGLVIPELNGKL DGSAQRVPVASGSLTELVSILERPVTEEINAAMKAAASESYGYNEDQIVSSDVVGIEYGSLFDATQTRVMTVGGKQLVKTVAWYDNEMSYTCQLVRTLEYFAGKI
206	1126 1164	MKTVSTAVVIAAAASLTGCATESSRSLEVEKVASYNTQYHGV RTPISVGTFDNRSSFQKGIFSDGEDRLGSQAKTILVTHLQQTNRFNVNRTNLNALQKQESGISGKAHNLKGADYVVTGDTVTEFGRDVGDHQLFGILGRGKSQIAYAKV ALNIVNVNTSEIVYSAQGAGEYALSREIIIGFGGTSGYDATLNGKVLDLAIAREAVNSLVQAVDNGAWQPNR
207	1799	MSEYLFTSESVSEGHPDKVADQVSDAILDAILAQDPKARVAAETLVTNTGLCVLAGEITTTAQVDYIKVARETIKRGYNSELGFDAANGCAVGVYYDQQSPDIAQGVNEGEgidlnQGAGDQGLMFYACDETPTLMPFAIYSHRLMQRQSELRKDGRLPWRPDAKAQLTVVYDSETGKVKRIDTVVLSTQHDPSSIAYEELKNAVIEIIKPVLPSELLTDETCKYLINPTGRFVIGGPQGDCGLTGRKIIIVDTYGGAAPHGGGAFSGKDPSKVDRSAAYACRYVAKNIVAAGLATQCQIQSYAIGVAEPTSISIDTFTGTGKISEEKLLIAVREHFDLRPKGIVQMLDLLRPIYSKSAAYGHFGREEPEFTWERTDKA

		AALRAAAGL
208	0110	MALLNILOQYPDERLHTVAKPVEQVDERIRKLIADMFTMYESRGIGLAATQVDVHERVVMDLTEDRSEPRVFINP VIVEKDGETTYEEGCLSPVGIYDTVTRAERVKVEALNEKEFKTLEADGLLAICVQHELDHLMGIVFVERLSQLKG GRIKTKLKKRQKHTI
209	0957	MSQYDVVVIAGPGGYVAAIRAAQLGFKTACVDAGVNKAGNAPALGGTCLNVGCIPSKALLQSSEHFHAAQHEFAE HGI TVGVDFKFDAAKMIEKDAIVTKLTGGVFLFQKNKVTSLFGTASFAGKNGDAYQIEVDNKGEKTVIEAKHVIV ATGSVPRPLPQVAIDNVNVLNDNEGALNLTEVPAKLGIVGSGIVLEGMSVWNRVGAEVTLLEAAPTFLAADQQJA KEAFKYFTKEQGLSIELGVKIGDIKSEGKGVSVAYETAAGEAKTEVFDKLIVAIIGRIPNTKGLNAEAVGLEKDERG FIKVDGECRTNLNVWAIGDVVRGPMIAHKASDEGVAVAERIAQKPHIDFNVPFVITYDPEIAWVGKTEEQLKA EGVEYKKGTSFGANGRALAMGKAKGTVKLADAKTDRILGVHMIGPVVSELVTEGVTALEFFASSEDIARIIH PTLSEVVHEAALAADKRALHG
210	1011	MMIEKSISIVDGKEYSVFAVSHEFRYTFDEPIVLADLISSLKAYETLTSSYLPAILNQLFDVKIQKIKVAVSEIER GSFLEKLIFNLFFKDDEAYNEFCLKIRKFLGTENQDGSIINMSKIIMFAMTLLGVGAGYLLFKNPPQEKOAITNNI VTVINADSSVALDGEHLVSVVKEVTGSSKQKTAENVAKVYAPASKNNNGSITLGTDDVRIEPAQQTVATLPKDVL RDTPLTEDYTDIDVQIRATDRDKNSGWYAVIDQIVPSVRLELPEDIDLNRANNATIRANVTVEFDLKQNGSRPK KKIILTLSSTD
211	1055	MFSKSVTLAQYDPDLAAAIAQEDQRQQDHVELIASENYVSCAVMDAQGSQLTNKYAEGYPGKRYYGGCEYDIVEQ LAIDRVKELFGAAYANVQPHSGSQANQAVYASVLPKGDTILGMSLAHGGHLTHGASVNISGKLYNAVTYGLDENEV LDYAEVERLALEHKPKMIVAGASAYALQIDWAKFREIADKVGAYLFVDMAHYAGLVAGGEYPNPVFCDFVTTTH KTLRGPRGGVILCRDNTHEKALNSSIFPSLQGGPLMHVIAAKAVAFKEALOPEFKQYAKQVKINAAMAAELVKRG LRIVSGRTESHVFLVLDLQPMKITGKAAEAALGKAHITVNKNAIPNDPEKPFVTSGIRIGSAAMTTRGFNEADARVL ANLVADVLSNPEDLEANLAKVRKVTALENCKYPVYGA
212	1437	MSARENILAKLKKADALPMEEPAVFDDYYREMGSWGEVERLKHAAAAMRAVKTEIWVTKSNWMOVFRREAAEGKG LKNILLPLATEHQIARAALADSNIPIAFEREIDTWKTEFFTNIAGFSGAQCIGARTGTMLFSSPEPRTLSL VPPVHFCLFDTSKMYNEFHNAVEGEKLVENGMPTNFLISGPSKTADIQLTLAYGAHGPRLVLILALPDHISPAD LEENA
213	1460	MSLNKVILIIGRLGRDPEVRYMPNGEAVCNFSVATSETWNDRNGQRVERTEWHNITMYRKLAEIAGQYLKKGGLVYL EGRIQSRKYQGKDGIERTAYDIVANEMKMLGGRNENSGGAPYEEGYGQSQEAYQRPAQSRQPASAPSHPQEAPA APRRQPVPAAPVEDIDDDIPF
214	1540	MNKKHGFLTALAIATAFPAYAAQAGGATPDAAQTSQSLKEITVRAAKVGRRSKEATGLGKIVKTSETLNKEQVL GIRDTRYDPGVAVVEQNGASGGYSIRGVDKNRVAVSDGVQAQIQAFTVQGSSLGSGYGGRRGGSGAINIEIYEYENIST VEIDKGAGSSDHGSALGGAVAFRTKEADLISDGKSWGIQAKTAYGSKNRQFMKSLGAGFSKDGWEGLLIRTERQ GRETRPHGDIADGVEYGIIDRLDAFRQTYDIKRKTREPFFSVEGERESKPVAKLAGYGKYLNNQLNRWVKERIEQNQ PLSAEEEAAQVREAQARHENLSAQAYTGGRILPDPMYRSGSWLAQKLYRFGGRHYVGGFEDTKQRYDIRDMTEK QYYGTDEAEKFRDKSGVYDGDDFRDGLYFVPNIEEWKGDKNLVRIGLKYRTKFIDEHHRRRMGLLYRYENEAY SDNWADKAVLFSFDKQGVATDNNTLKLNCAVYPAVDKSCRASADKPYSYDSSDRFHYREQHNVLNASFEKSLKNWT KHHHTLGFGYDASKAISRPQLSHNAARISESTGFDENNQDKYLGLKPEVVEGSGVCGYIETLRSRKCVPRKINGSN IHISLNDRFSIGKYFDFSLGGDRKNFTSEELVRSGRYVDRSWNSGILFKPNRHSFSVSYRASSGFRTPSFQELF GIDIIYHDYPKGWQRPALKSEKAANREIGLQWKGDFGLEISSFRNRYTDMIAVADHKTLPNQAGQLTIEDIRDYY NAQNMISLQGVNILGKIDWNGVYGKLPLEGLYTTLAYNRIKPKSVSNRPGLSSLRSYALDAVQPSRYVLGFQYDQPEGK WGANIMLTYSKGKNPDELAYLAGDQKRYSTKRASSWSTADVSAYLNKKRRTLRAAIYNIGNYRYVTWESLRQTA ESTANRHGGSNSYGRYAAPGRNFSLALEMKF
215	1554	MTKFIFVTGGVVSSLKGKIAASIAAILESRGLNVMLKDPINVDPGMSPFQHGEVFVTDGAETDDLGHYE RFIDSTMTRNSFSTGQVYENVIAKERRGDYLGTVQVIPHTDEIKRRIHEGAAGYDVAIVEIGGTGDIIESLPF LEAIROMRSQQLGRNNTLEFAHLSYVPYIAAAEIKTKPTQHTVKEMLSIGLQPDILICRMDRTMPADERKIALFCN VEERAIVGSDVDSIYECPEMLHDQGIDNITEQLQNVQQADLTAWKIVHAIQNPKHTVKIAMVGKYYVDLTESY KSLIEALKHAGIHTETDVQITFVDSENIEKNGDVSMLKMDAIIIVPGFGSRGVEGKIAAVRYARENVPYLGIC LGMQIALIEYARDVAGLKGANSTEFDLKAAPVVALIDEWQTAGSVETRDESTLGGTMRLGAQEVELKAGSLAA KIYGSIGHIRERHRHRYEVNNNYVPTLEQAGLVIIGVSGAGRERLVTETIELPNHPWFFACQFHPEFTSNPRKGHLFT AFVKAALNNKA
216	1576	MRHILSVLIENESGAMSRRVGLFSARDYNIDS LAVAPTEDKTL SRMTIVTHGDEQVIEQITKQLNKLIEVIKVVDL NESRFVERELMLVKVRAAGKDRDEFRLTEIYRGSIIDVTDRSYTIEITGSTDKLDSFLETVGRAQILETVRTGAA GIGRGERILKI
217	1808	MRLFKSLKNPKKTDALKPKSSGLNNRAIGIDIDQHSIKMVQLSGRSLSNQIQLKEVIAKLPNIIQGNKVQNYD QLVTYLOQAYAKLGTSCKNIIASVPQNLATIEQLTYTDKDAELDLQGFVESSISEVSSISLEEANYDYQVLSQSAA GEAVLAVASRKDEIEPLIDAFNAAGMKL SALDVDIFGQYNAVALWINHFAPELAAEKVIAFGVYAAQTYALVIQDG KILYKOETSSEEQNLQIORTYQVTEEKAEIINSPKPSDYQESVANYFNQQITQEIQRVLQFYTTQTADDMT DIKHILLTGEAARQEGIAQTVASQTNADVQCVHPARYFADNLKTDQFELDAPLTLRAFLAVRGL